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THE

BRITISH HERBAL:

AN

HISTORY

OF

PLANTS and TREES,

NATIVES of BRITAIN,

CULTIVATED FOR USE,

OR

RAISED FOR BEAUTY.

By JOHN HILL, M.D.



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MDCCLVI.



To the RIGHT HONOURABLE

The Earl of NORTHUMBERLAND.

My LORD,

IF I omit the other additions with which your name ſhould ſtand accompanied, 'tis becauſe I addreſs you under a greater; PATRON OF USEFUL KNOWLEDGE: nor ſhall I ſtop there, ſince I may add that higheſt of all human titles, FATHER OF THE DISTRESSED. To have raiſed a little hoſpital to the full uſe and purpoſe of the moſt eſtabliſhed charities, is more than to have amaſſed the total ſtores of knowledge; or to have received all the diſtinctions in the power of Kings.

To

DEDICATION.

To ſpeak of your LORDSHIP as is the cuſtom on theſe occaſions, would appear with a new air; for to you, the language of dedications would be truth: yet though it were no more than ecchoing the univerſal voice, I know 'twould be unpleaſing; for all applauſe ſounds to a delicate ear like flattery.

Though I ſhall not crowd the page addreſſed immediately to your LORDSHIP's eye with praiſe; or tranſcribe their wonder who ſee greatneſs ſo joined with affability, and knowledge ſo united to politeneſs; one thing I ſhall ſay, and 'tis with pride and pleaſure I ſhall ſpeak it, that in this age, unfavourable as it is to literature, the leaſt attempt toward rendering knowledge uſeful is not without its patron. When England ſhall be able to produce a LINNÆUS, he will not a want a CLIFFORD.

Though I can by this addreſs add nothing to that great opinion the world juſtly entertain of your LORDSHIP's virtues, I am conſcious that I ſhall, in publiſhing it, do myſelf the higheſt honour it is poſſible I ſhould obtain. Science can boaſt no greater glory, than to receive the patronage of Virtue.

I have the honour to be,

With the greateſt reſpect,

My LORD,

Your LORDSHIP's moſt obedient,

and moſt humble ſervant,

JOHN HILL.

THE

BRITISH HERBAL.

CLASS I.

Plants whoſe flower conſiſts of SEVERAL PETALS*, *with* NUMEROUS THREADS *in the centre, and is followed by a cluſter of* NAKED SEEDS.

THIS is a claſs diſtinguiſhed by natural and obvious characters; and is proper for the ſtudent's firſt conſideration, becauſe the flowers and ſeeds are conſpicuous, and the parts are *few*, *large*, and *plain*.

Mr. Ray eſtabliſhed it as a claſs; and the regard he has ſhewn to the order of nature, in keeping theſe plants together, is a proof that his method, tho' plain and ſimple, is in ſome inſtances, better founded than thoſe built upon ſmaller parts, and nicer diſtinctions.

Nature has joined no plants ſo plainly together as thoſe which conſtitute this claſs: yet Moriſon, Tournefort, and others, have diſtributed them in various parts of their works; and Linnæus has united the greater part of them with many other plants not properly ally'd to them, under the denomination of *polyandria*; a claſs altogether artificial, having but a miſtaken foundation in nature.

This author in the ſeventh ſection includes, among what he calls *polyandria polygynia*, the crow-foot, which bears its ſeeds naked, and the hellebore, which has them included in pods.

Nature ſeparates theſe plants, tho' Linnæus joins them.

SERIES I.

Natives of BRITAIN.

THIS ſeries includes all thoſe genera, of which one or more ſpecies are natives of our country. The ſecond comprehends thoſe only of which we have none naturally wild.

To prevent the ſeparation of thoſe plants which nature has joined in form, tho' divided in their place of growth, we ſhall, under each of the Britiſh genera, after deſcribing thoſe ſpecies which are natives here, add ſuch as, for their uſe or beauty, have obtained a place in our gardens. But to prevent confuſion or error, we ſhall there arrange the ſpecies diſtinctly under two diviſions, as we have here diſtributed the *genera*, native, and foreign, under two *ſeries*.

* The leaves which compoſe a flower are called petals.

GENUS I.

STRAWBERRY.

FRAGARIA.

THE *ſtrawberry* has three leaves on each footſtalk; the flower conſiſts of five petals, and its cup is divided into ten unequal ſegments.

The fleſhy ſubſtance of the fruit is no character of this genus, for ſome ſpecies have it not.

Linnæus ſeparates this with ſome others from the reſt of the claſs, arranging it among his *icoſandria*, and placing it next the roſe and bramble.

Imperfect obſervations might lead us to ſuppoſe there was an alliance between the fruit of the *ſtrawberry* and bramble; and little genius's might cavil at the placing it here among plants with naked ſeeds: but the diſtinctions of nature are ſufficiently correct if men will properly regard them: the bramble will then be found a berry-bearing ſhrub; the *ſtrawberry* a naked ſeeded plant.

A berry is a fruit which has the ſeed ſurrounded by a juicy matter, and encloſed in a ſkin. Each grain of the blackberry is therefore ſuch; but in the *ſtrawberry* the ſeeds are diſpoſed quite otherwiſe: They are neither ſurrounded by juice, nor covered with a ſkin: they ſtick *naked* on the outſide of the fruit.

In all the plants of this claſs the ſeeds adhere to ſome ſubſtance at their baſe; and in the preſent inſtance that ſubſtance ſometimes ſwells out, and becomes fleſhy: but the ſeeds are ſtill naked, the fruit is no berry, and the plant belongs to this claſs.

DIVISION I. BRITISH SPECIES.

1. Barren Strawberry.

Fragaria ſterilis.

The root is thick, hard, covered with a browniſh bark with a tinge of red, and edged with fibres.

The leaves ſtand three on each footſtalk; and are of an oval figure, notched round the edges, and of a pale green: they are covered with a ſhort, ſoft hair, and lie ſpread on the ground. Their footſtalk is two inches long, and has a couple of ſmall membranes at its baſe.

The ſtalks are ſlender, ſhort, and weak: they are hairy, and have each a leaf or two on them divided into three parts.

Uſually there ſtands but one flower on each footſtalk, and this is large, white, and beautiful. It is compoſed of five broad leaves, dented at the ends; and has in its centre a tuft of ſhort threads. It ſtands in a ſmall cup divided into ten parts at the edge.

When the flower falls the ſeeds ripen in a little cluſter. They are ſmall, and have no pulpy matter about them; but five of the diviſions of the cup cloſe over and defend them.

It is very common in dry paſtures and on ditch banks; and flowers in April.

The bark of the root, dried and powdered, is excellent in diarrhœas: a ſcruple is a doſe. This I write from experience; others ſeem not to have conſidered it as a medicine.

J. Bauhine calls this ſpecies *Fragaria non frugifera vel non veſca.* C. Bauhine, *Fragaria ſterilis.*

2. Common Strawberry.

Fragaria vulgaris.

The root is long, thick, of a reddiſh brown, and edged with many fibres.

The footſtalks are three or four inches long; and each ſupports three leaves. Theſe are oblong and broad, and ſerrated; of a dark green on the upper ſide, and whitiſh underneath.

The ſtalks are four or five inches high: they divide at the top, and ſupport ſeveral flowers.

Theſe are large and white: each conſiſts of five leaves, and has in its centre a great tuft of threads with yellow buttons.

The fruit follows, and is a fleſhy receptacle for the ſeeds: it is large, pulpy, and pleaſant. The ſeeds are numerous, ſmall, and ſharp-pointed; and they are ſtuck in the ſides of the fruit.

It is common in woods, and thence brought into gardens, where culture has made it aſſume various forms. It alſo naturally differs in the ſize of the fruit in different countries.

The moſt conſiderable of theſe *varieties* are two: 1. *The plum-fruited ſtrawberry:* and, 2. *The great-fruited ſtrawberry of Chili, with fleſhy leaves.*

C. Bauhine has deſcribed the firſt, and Dillenius the latter of theſe as diſtinct ſpecies; but they are accidental variations.

DIVISION II. FOREIGN SPECIES.

3. Shrubby Strawberry.

Fragaria frutoſcens.

The root is long, woody, and edged with fibres.

The leaves ſtand on footſtalks, three upon each, as in the *common ſtrawberry*; and are large, oblong, and conſiderably hairy.

The ſtalk riſes from the centre of the root, among the leaves, and is woody, firm, and two foot high. Toward the top it divides into two or three parts, and ſpreads into a round head. There are leaves like thoſe which riſe from the root, at the inſertions of theſe branches; and upon their tops ſtand the flowers.

Theſe are ſmall and greeniſh, much of the ſame colour with the leaves, but of the form of the *common ſtrawberry flower.*

The fruit is conic in ſhape, and is partly red, partly green. The hairs that riſe from the ſeeds are very rough, and alſo greeniſh.

It

It is a native of Italy, and flowers and bears its fruit there ſomewhat earlier than our *ſtrawberry*.

Zanoni calls this *Fragaria arborea flore herbaceo*. Moriſon, *Fragaria major veſca flore herbaceo*..

The fruit of the *garden ſtrawberry* is cooling; and when eaten in any quantity, wine and ſugar are proper additions.

The leaves are cooling and diuretick. An infuſion of them is good in ſtranguries; and, when made ſtronger, in the jaundice. Powdered, they are uſeful in dyſenteries; and a decoction of them ſweetened with honey, is an excellent gargle for ſore throats. They have the credit alſo, of being a coſmetick; but for that there is no great authority.

GENUS II.

CINQUEFOIL.

PENTAPHYLLUM.

Cinquefoil has five leaves on every footſtalk, and five petals in each flower. The ſeeds ſtand in a ſmall button; and the cup is divided into ten unequal ſegments.

Linnæus places this among his *icoſandria polyginia*; the threads being about twenty in each flower, and growing to the inſide of the cup or the petals; and the ſtyles, from the rudiments of the ſeeds, numerous.

DIVISION I. BRITISH SPECIES.

1. Common Cinquefoil.

Pentaphyllum vulgare.

The root is long, thick, and brown.

The leaves ſtand five on each footſtalk, and are oblong, hairy, and of a duſky green, ſerrated at the edges, and rounded or blunt at the ends: the footſtalks are ſlender, and three inches long.

The main ſtalks of the plant are long, very weak, and creeping. From the bottoms of the leaves riſe ſlender pedicles, each ſuſtaining a ſingle flower. This is large, of a bright yellow, compoſed of roundiſh leaves, heart-faſhioned at the ends, with a great cluſter of ſhort threads in the centre, and it ſtands in a cup formed of one leaf and divided into ten parts at the edge.

When the flower is fallen the ſeeds ripen in a little cluſter, which is defended by five ſegments of the cup cloſing about it; the ſame five cloſe about the flower while in the bud.

The long creeping ſtalks take root at the joints, whence leaves alſo ariſe, and the plant thus propagates itſelf abundantly.

It is frequent by way ſides, and flowers in June.

The root is aſtringent: its outer rind is the moſt valuable part, and it is beſt given in powder, twelve grains for a doſe. It thus ſtops purgings, and is good in hæmorrhages of all kinds, particularly the overflowings of the menſes, and ſpitting of blood.

In a larger doſe it will often cure intermittent fevers,

A ſtrong decoction of it is alſo good for ſore mouths.

J. Bauhine calls this *Pentaphyllum vulgare repens*. C. Bauhine, *Quinquefolium majus repens*.

2. Silver-leaved Cinquefoil.

Pentaphyllum erectum foliis ſubtus argenteis.

The root is large, thick, and woody, brown on the outſide, and white within: it divides into many heads, and has ſeveral fibres.

The ſtalks are numerous, firm, upright, hairy, and ſix inches high.

The leaves ſtand alternately: they have longiſh footſtalks, at the baſe of which there is a little appendage, ſurrounding the ſtalk: they are deeply divided at the edges into five large, but irregular parts, and are of a duſky green above, and white underneath.

The flowers are ſmall, and of a bright yellow: They are compoſed each of five petals, with a large tuft of threads in the centre.

The ſeed is ripened in ſmall cluſters. Five of the ten ſegments of the cup in this, as the others, ſurround firſt the bud of the flower, and afterwards the cluſter of ſeeds.

It is common in dry barren places, and flowers in June.

Its virtues have not been try'd, they are probably the ſame with thoſe of the other, but in a leſs degree.

J. Bauhine calls this *Pentaphyllum erectum foliis profunde ſectis ſubtus argenteis flore luteo*. C. Bauhine, *Quinquefolium folio argenteo*.

3. Little rough Cinquefoil.

Pentaphyllum parvum hirſutrum.

The root is long, thick, and black.

The leaves that riſe from it are ſmall, five on each footſtalk, and hairy: they are of a duſky green, and deeply ſerrated: the footſtalks that bear them are about two inches long.

The main ſtalks riſe among theſe. They are ſlender, hairy, and of a rediſh colour, and lie ſcattered on the ground.

The flowers ſtand at the tops of the branches, and are large, and of a beautiful yellow.

It grows in dry paſtures, but is not frequent: I have ſeen it near Loughborough. It flowers in June.

J. Bauhine calls this *Pentaphyllum parvum hirſutum*. C. Bauhine, *Quinquefolium minus repens aureum*.

4. Three-fingered Cinquefoil.

Pentaphyllum minus repens foliis tripartitis.

The root is ſmall and long; it is brown on the outſide, and has many fibres.

The leaves ſtand on footſtalks, which are ſlender, weak, and rediſh. They have three principal diviſions, and two ſmaller; appearing to be compoſed of five leaves thus irregular in their ſize.

The ſtalks run upon the ground and root at the joints, as in the *common cinquefoil*.

The

The flowers are very beautiful, moderately large, and of a gold yellow, with a tuft of threads in the centre.

The ſeeds ſtand in a little cluſter.

It is a ſcarce plant. I have ſeen it in Charlton foreſt in Suſſex, where it flowers in September.

Plukenet deſcribes this, Alm. p. 285.

5. Silky Cinquefoil.

Pentaphyllum pumilum foliis ſericeis.

The root is oblong, ſmall, brown, woody, and edged with fibres.

The leaves riſing from it are ſmall, and ſtand upon very ſlender footſtalks. They are irregularly divided into five parts; three principal, which are forward, and two leſſer toward the ſtalk. Theſe laſt are always ſmall, and often wanting; and they, as well as the others, are notched at the tops. Their colour is a whitiſh green, and they feel ſilky.

The ſtalks are numerous, ſhort, and ſpread upon the ground. The leaves on them are like thoſe from the root, but uſually they have only the three diviſions.

The flowers are ſmall and yellow.

The ſeeds ſtand in a little naked head.

It is not common in England, but frequent in the hilly parts of Scotland.

Sibbald calls it *Fragariæ ſylveſtri affinis planta flore luteo.* Plukenet, *Pentaphyllum fruticoſum minimum procumbens flore luteo foliis ſericeis fragariæ ternis.*

DIVISION II. FOREIGN SPECIES.

1. Upright Cinquefoil.

Pentaphyllum rectum majus.

The root is long and thick, of a rediſh brown on the outſide, paler within, and edged with fibres.

The leaves which riſe from it are placed on ſhort footſtalks, and deeply divided into five parts; ſometimes into more, often into leſs; and frequently the firſt leaves are ſcarce divided at all. Theſe diviſions or ſeparate leaves are oblong, narrow, and deeply indented.

The ſtalk is two or three feet high, firm, hard, round, rediſh, and a little hairy, with leaves irregularly placed, reſembling the other, but with fewer diviſions.

The flowers ſtand at the tops of the branches, into which the upper part of the ſtalk divides; and are large, of a fine gold yellow, and ſweet ſcented.

The ſeeds ſtand naked in a little cluſter, defended by the cup.

It is a native of Italy and the ſouth of France, and flowers in June.

The flowers are ſometimes white.

C. Bauhine calls it *Quinquefolium rectum luteum.*

2. White flowered Cinquefoil.

Pentaphyllum majus flore albo.

The root is long, ſlender, brown, and furniſhed with fibres.

The footſtalks of the leaves are two or three inches long, ſlender, weak, and hairy. Five leaves ſtand on each; and they are oblong, broad, pointed at the ends, and hollowed. They are of a deep green, and ſmooth on the upper ſide, and hairy and white underneath.

The ſtalks are ſix or eight inches high, but weak and ſlender. They have numerous leaves ſtanding irregularly on them, and divide toward the top into branches.

The flowers ſtand on footſtalks ſingly towards their tops, and are large and white, with yellow threads in the centre. They much reſemble thoſe of the ſtrawberry.

The ſeeds are ſmall, and ſtand in a cluſter.

It is a native of Hungary, and many other parts of Europe, and flowers in June.

J. Bauhine calls this *Pentaphyllum album.* C. Bauhine *Quinquefolium album majus.*

3. Yellow alpine Cinquefoil.

Pentaphyllum minus aureum.

The root is long and ſlender, of a duſky brown, and furniſhed with fibres.

The leaves that riſe immediately from it ſtand on long ſlender pedicles, five on each; and they are oblong, broad, ſerrated, and pointed at the ends. They are of a ſhining green, but have a few ſcattered hairs upon them.

The ſtalks are weak, and hardly ſtand upright. They have ſeveral leaves on them, placed irregularly; and thoſe toward the upper part are divided into three, rather than five ſegments.

The flowers ſtand on long footſtalks; and are large, of a bright yellow, with a great tuft of deeper yellow threads in the midſt.

When theſe are fallen, the ſeed appears in ſmall cluſters naked.

It is a native of Italy and Germany, and flowers in June. The virtues have not been tried.

C. Bauhine calls this *Quinquefolium minus repens alpinum aureum.*

GENUS III.

BASTARD CINQUEFOIL.

PENTAPHYLLOIDES.

THE flowers and ſeeds of this are like thoſe of *cinquefoil*; but the leaves are more numerous, and ſtand in two rows, with an odd one at the end. Linnæus places this among his *icoſandria polygynia*; the threads riſing from the cup or petals, and the rudiments of the ſeeds being numerous.

DIVI-

DIVISION I. BRITISH SPECIES.

1. Strawberry Cinquefoil.

Pentaphylloides fragiferum.

The root is large, rediſh, and woody. It is divided at the top into ſeveral heads, and has a few fibres.

The footſtalks of the leaves are four inches long, tender, and hairy. The leaves on each are five or ſeven. Three larger ſtand at the extremity, and are broad, oblong, hairy, ſerrated, and not unlike thoſe of ſtrawberry, but leſs. Below theſe there are two or four ſmaller; ſo that the whole leaf is of the winged kind, not fingered as in the *right cinquefoils*.

The ſtalk is round, firm, erect, and two feet and a half high. It is hairy, and divided at the top into branches.

The leaves on this are few, and placed irregularly. They conſiſt uſually of five leaves on the under part, and only three higher up. Something like this is ſeen alſo in the *right cinquefoils*, in which, though the radical leaves have always five, theſe have in ſome ſpecies only three diviſions. Theſe leaves are of the ſhape of the others, but ſmaller.

The flowers are numerous, large, and white. They ſtand at the tops of the branches, and are ſucceeded each by a head or cluſter of ſeeds, in ſome degree reſembling a ſtrawberry.

It grows wild in Wales, and ſcarce elſewhere in Britain. It flowers in May and June.

J. Bauhine calls it *Pentaphyllum erectum*, and C. Bauhine *Quinquefolium fragiferum*.

2. Purple Marſh-Cinquefoil.

Pentaphyllum paluſtre rubrum.

The root is long, blackiſh, and woody. It ſpreads a great way under the ground, and ſends out many large fibres, which are white or rediſh.

The footſtalks of the leaves are three or four inches long. On each ſtand five or ſeven leaves in two or three pairs, with an odd one at the end. Theſe are oblong, narrow, and ſharply ſerrated. Their colour is a bluiſh green on the upper ſide, and whitiſh underneath.

The ſtalks are a foot and a half long, but weak, and not very upright. They are often rediſh, and are in part covered with a kind of ſcabbards from the leaves.

The leaves ſtand alternately on them: they uſually have only two pairs of wings, and an odd one; and are in ſhape and colour like the others.

The flowers ſtand at the tops of the branches, and are large and beautiful, but of a ſingular ſtructure. There are five, broad, and pointed ſegments of the cup, which are purple within, and themſelves reſemble a flower. In theſe there ſtand five proper petals of the flower, which are alſo of a deep purple; but they are ſmall, and the leaves of the cup are much more conſpicuous. In the centre there is a cluſter of purple threads.

When the flower is fallen, there comes a button or head of ſeeds, in form reſembling a ſmall ſtrawberry.

It grows in muddy places in the north of England, but not frequently. Some plants of this have been ſet in one of the bogs on Hampſtead heath; but they do not thrive.

It flowers in June.

C. Bauhine calls it *Quinquefolium paluſtre rubrum*. J. Bauhine, *Pentaphyllum heptaphyllum flore rubro*.

3. Thick-leaved marſh Cinquefoil.

Pentaphyllum paluſtre rubrum craſſis foliis.

The root is ſlender, long, and ſpreading, black on the outſide, and reddiſh within.

The leaves that riſe from it are very like thoſe of the laſt deſcribed ſpecies; but they grow with leſs regularity. Uſually there are three pairs on a ſtalk, with an odd one at the end; ſometimes only two pairs, and not unfrequently there riſes a ſingle one near the place where the footſtalk adheres to the root. Theſe footſtalks are weak and hairy, and the leaves thick and fleſhy; ſo that they are well ſupported. They are of a pale green, and are much more hairy than thoſe of the former; though in theſe it is but moderate.

The ſtalks are low, weak, and ſhort, round, and uſually rediſh toward the bottom.

The leaves on them are ſmall, and in ſhape and colour like the diviſions of the others, and ſtand in an uncertain number and irregular manner.

The flowers ſtand at the tops of their diviſions, which being ſmall and weak are ſcarce able to ſupport them. They are large, and of a deep purple, with a cluſter of threads in the middle.

The ſeeds ripen after in a little cluſter.

It is common in Ireland, and in the north of England, as about Carliſle, and in ſome parts of Yorkſhire. It flowers in July.

Plukenet calls it *Pentaphylloides paluſtre rubrum craſſis & villoſis foliis ſuecicum & Hibernicum*.

4. Shrubby Cinquefoil.

Pentaphylloides fruticoſum.

The root is compoſed of a ſmall head, with a large number of thick fibres, and ſpreads greatly.

The ſtalk is round, firm, upright, woody, and of a brown colour; and towards the top it divides into ſeveral branches.

The leaves ſtand on ſhort footſtalks, riſing alternately from different ſides of the main ſtalk. They are oblong, and of a pale green on the upper-ſide, and ſmooth; on the under-ſide they are whitiſh and woolly. Seven of theſe generally ſtand on each footſtalk, and they are divided as it were into four and three. Sometimes there are only five.

The flowers grow on the tops of the diviſions of the ſtalks; and they are large and yellow. They conſiſt each of five leaves, with a tuft of threads in the middle.

They quickly fall off, and the ſeeds follow in a ſmall button; but nature has leſs regard to the ripening of theſe, becauſe the plant is well propagated by the root.

The ſtalk of this plant throws off its bark frequently, ſo that it is commonly ragged.

It is a native of the northern parts of England, and flowers in June and July. About Thorpe and Eggleſtone abbey in Yorkſhire it is common.

Ray calls it *Pentaphylloides fruticoſum*.

DIVISION II. FOREIGN SPECIES.

1. Many-leaved Pentaphylloides.

Pentaphylloides ſupinum potentillæ facie.

The root is long and blackiſh. It is divided into many heads, and ſpreads under the ſurface.

The leaves are very numerous. They ſtand on footſtalks two inches long, and are compoſed of three or more pairs of ſmaller leaves, with an odd one at the end. Theſe are oblong, narrow, ſharply ſerrated, and of a pale green.

The ſtalks are a foot and a half long, but weak and yellow. They are divided into many branches toward the top, and have the ſame kind of leaves with thoſe from the root, but ſmaller and fewer on a footſtalk.

The flowers are moderately large, and yellow. They conſiſt each of five leaves, and have a tuft of threads in the middle.

When theſe are fallen the ſeed ſucceeds in a little naked cluſter.

It is a native of Germany, and flowers in July.

J. Bauhine calls it *Pentaphylloides ſupinum*. C. Bauhine, *Quinquefolio fragifero affinis*, from the ſmall heads of ſeed ſomewhat reſembling an unripe ſtrawberry; but this is leſs than in many others, where it is not obſerved.

2. Silver-leaved ſtrawbery Cinquefoil.

Pentaphylloides argentum fragiferum.

The root is long, thick, blackiſh, and woody, and is well furniſhed with fibres.

The leaves are numerous. Their footſtalks are an inch and a half long; and they are compoſed each of nine parts, or divided into nine ſegments, ſo deep that they appear ſeparate. Theſe are placed in four pairs, with an odd one at the end; and are narrow, longiſh, and ſerrated very ſharply. They are of a pale green, and hairy. In the ſhape and diſpoſition of the diviſions they much reſemble the leaves of the common ſilverweed.

The ſtalks are numerous, very ſmall, and ſlender. They do not exceed four inches in length. They trail on the ground, and have the ſame kind of leaves irregularly placed on them as thoſe at the root. Toward the top they divide into little branches, and others riſe from the bottoms of the leaves.

The flowers are ſmall, but of a beautiful gold yellow. They conſiſt each of five leaves, and have a tuft of threads in the middle.

The ſeeds ripen in a ſmall head, and are covered in part by five of the ſegments of the cup.

This is frequent in Switzerland, and flowers in July.

C. Bauhine calls it *Quinquefolio ſimilis enneaphyllos*; and Parkinſon *Enneaphyllon*; from its having nine leaves on a footſtalk.

All theſe ſpecies of *pentaphylloides*, and thoſe of *cinquefoil*, agree in virtues as they do in their characters with the *common cinquefoil* of our fields. This their taſte manifeſts. They have not been ſeverally tried; but there is not one whoſe root does not poſſeſs a ſtrong aſtringency. Perhaps in this, as in many other caſes, we do wrong in confining our trials to ſome one ſpecies. Others may have greater virtues in the ſame way than that commonly uſed. We ſee this in mint; only one ſpecies of which was regarded in medicine of a long time, but another has ſince been introduced; and many others deſerve to be ſo.

GENUS IV.

SILVERWEED.

ARGENTINA.

THE leaves of *ſilverweed* are pinnated, and the ſtalks creep and take root at the joints. The flowers and ſeeds agree with thoſe of cinquefoil. This is one of the *icoſandria polyandria* of Linnæus; that author ranking this plant, cinquefoil, and pentaphylloides, together under the name of *potentilla*.

Of this genus there is but one known ſpecies, and that is a common wild plant.

Common Silverweed.

Argentina vulgaris.

The root conſiſts of a ſmall head, and a vaſt multitude of fibres. It is of a deep brown, and has an auſtere taſte.

The leaves riſe in great numbers. They ſtand on ſhort pedicles, and are very beautifully pinnated, each conſiſting of ſeven or eight pairs of ſmall leaves on a ſtalk, and an odd one at the end. Theſe are oblong, narrow, deeply ſerrated at the edges, and obtuſe at the ends.

The ſtalks reſemble thoſe of cinquefoil. They are long, weak, red, and lie upon the ground, taking root at the joints. From theſe places riſe alſo new cluſters of leaves.

The flowers ſtand on long naked footſtalks riſing from the boſoms of the leaves; and they are very large and beautiful. They are compoſed each of five petals, of a roundiſh figure, not dented at the tops: and are of a moſt beautiful ſhining yellow: in the middle of each there is a tuft of threads, with yellow buttons; but ſmaller than in cinquefoil, and of a paler yellow.

The ſeeds are ſmall: they grow in a roundiſh head, and are defended by five of the ten ſegments of the cup which cloſe over them. Theſe are hairy, and pointed. Nature in this, as in other plants that run ſo quick at the ſtalk, takes leſs care in ripening the ſeed.

It is frequent in barren places, and flowers in June.

The root poſſeſſes the greateſt virtue, and it deſerves to be much more known in medicine than it is.

It is cooling and aſtringent: and, to ſpeak from experience, is excellent in diarrhœas where the ſtools become bloody, and in overflowings of the menſes. The beſt way of giving it is in powder, and its doſe is a ſcruple. The young leaves in an infuſion are diuretick.

I have tried it in intermittent fevers, and not wholly without ſucceſs, though not with that degree of certainty which attends ſome other medicines. From what experience ſhews of the efficacy and ſafety of this, and many of the roots of our own product, we ſeem inexcuſable in not purſuing theſe uſeful reſearches. Botany, which has of late become a ſcience much ſtudied for curioſity, deſerves to be much more cultivated for uſe.

GENUS V.

TORMENTILL.

TORMENTILLA.

THE flower of *tormentill* conſiſts of four petals, and has a tuft of threads in the middle. The leaves ſtand ſeven upon a ſtalk.

This is one of the *icoſandria polygynia* of Linnæus; tho' it ſhews the claſs of that author ill named, the threads in this being but ſixteen, whereas the word *icoſandria* expreſſes *twenty*: *himſelf* acknowledges however, that the number twenty is not eſſential to the diſtinction, tho' he has thence given the name.

That author ſeems to have corrected himſelf alſo, for eſtabliſhing this as a diſtinct genus. He acknowledges that it is an artificial, rather than a natural diſtinction; but we wiſh, for the ſake of thoſe he has ſometimes miſled from the true end of this ſtudy, that he had made more ſuch errors.

He was in the right here againſt his own correction; for *tormentill*, whoſe flower conſiſts of four petals, is naturally diſtinguiſhed as a genus from cinquefoil, whoſe flower has five.

Nature has alſo preſerved the diſtinction, by allotting the number of ſeven leaves together on this plant, in which it differs from the cinquefoil, which has but five: nor does it leſs differ from the pentaphylloides, which has the ſame number, in their manner of growing: in thoſe plants, they ſtand in the pinnated form, each whole leaf conſiſting of ſeveral pairs and an odd one; but in *tormentill*, they grow together from one point, as in the cinquefoil.

On theſe diſtinctions, by which it is ſo perfectly ſeparated from all the precedent, and all the ſubſequent genera, *tormentill* has a right to a diſtinct place and name; and it is not Linnæus, who ſeparated them, that errs; but he would do ſo, who, following that author's ſecond thoughts, ſhould join this and cinquefoil under one common name.

We have in this incident, a ſtrong inſtance how far the love of ſyſtem will carry a man of knowledge; it will lead him to correct what he did, knowing it to be right, and compel him into what is plainly wrong afterwards.

Of this genus there are but two known ſpecies, and both are natives of England.

1. Common Tormentill.

Tormentilla vulgaris.

The root is large, thick, and of an irregular form; of a browniſh colour on the outſide, rediſh within; and furniſhed with many fibres.

The leaves that riſe from the root are few, not deeply divided, and of ſo little duration that they are rarely ſeen.

The ſtalks are numerous, long, ſlender, rediſh, and a little hairy. They often lie in part upon the ground; but ſometimes ſtand upright, to the height of ſix or eight inches.

The leaves grow on them at diſtances, and ſurround them. They are each compoſed of ſeven which are oblong, narrowiſh, and ſerrated. Their colour is a duſky green, and they are a little hairy.

The flowers ſtand at the tops of the branches, and are ſmall, but of a bright and beautiful yellow. They are compoſed each of four broad petals, and have a tuft of threads in the middle.

When they are fallen the ſeed ripens in ſmall heads.

It is common on heaths and in dry paſtures. Hampſtead heath abounds with it. It flowers in July and Auguſt. The generality of authors deſcribe it under the name of *tormentilla* and *tormentilla vulgaris*.

It is an excellent aſtringent. The root poſſeſſes the greateſt virtue, and may be given in powder or in decoction. In the firſt way twelve grains is a doſe, in the latter an ounce and half may be put into three pints of water and boiled to a quart.

Either way it is good in diarrhæas and hæmorrhages.

Beſide theſe it poſſeſſes the virtues of a ſudorifick and cordial. It is therefore one of the beſt medicines the materia medica affords us in fevers attended with purging.

It is at all times good in the ſmall pox; but when a diarrhœa comes on improperly in that diſorder nothing excels it.

2. Creeping Tormentill.

Tormentilla repetans.

This is a beautiful little plant, which Plot, Moriſon, and others, from its numerous flowers, ranked among the cinquefoils; but the plain diſtinctions we have eſtabliſhed in the characters of thoſe two genera, ſhew it to belong to this.

The root is compoſed of a ſmall head, and a great quantity of fibres, which are brown, tough, and of an auſtere taſte.

The leaves are very beautifully divided; they ſtand on ſhort, rediſh footſtalks, which are weak,

and

and a little hairy: they are of a fine green colour, and ſharply ſerrated.

The ſtalks riſe in the centre of theſe, four or five from each head of the root. They are long, ſlender, rediſh, and run upon the ground in the manner of thoſe of cinquefoil, and ſend roots at every joint downwards, and tufts of leaves, and often new ſtalks upwards.

The flowers are moderately large, and of a beautiful yellow, with a little tuft of paler threads in the middle. They conſiſt each of four petals, whence it is plain the plant is a *tormentill*, not a cinquefoil.

When theſe are fallen, the ſeeds ripen in a ſmall oval cluſter.

It is not common. Plot and Moriſon found it in Oxfordſhire. I have ſeen it on the edge of Charlton foreſt in Suſſex.

Its virtues are probably of the ſame kind with thoſe of the former, but in a leſs degree.

Moriſon calls it *Pentaphyllum minus viride flore aureo tetrapetalo radiculos in terram ad genicula demittens.* Plot, *Pentaphyllum reptans aureum foliis profundius ſerratis.*

Bauhine and others deſcribe a larger kind of *tormentill* with a ſweet-ſcented root; but this is an accidental variety, not a diſtinct ſpecies.

GENUS VI.

AVENS.

CARYOPHYLLATA.

THE flower of *avens* conſiſts of five petals, with a tuft of threads in the centre. The ſeeds have long and crooked hairs growing to them; and the leaves are pinnated.

Linnæus ranks this among the *icoſandria polyginia*; and taking away its antient and proper name, calls it *geum*.

This laſt is a name uſually underſtood to be long to a very different plant. This is therefore one of thoſe inſtances in which he has brought in needleſs confuſion. The antient name, *caryophyllata*, is very proper; the root of this plant having a fragrant and aromatick ſmell, reſembling that of the clove ſpice, caryophyllus.

DIVISION I. BRITISH SPECIES.

1. Common Avens.

Caryophyllata vulgaris.

The root is thick, and of an irregular figure, and uſually lies obliquely in the ground. It is of a rediſh colour, an auſtere taſte, and a very light, pleaſant, aromatick ſmell; and has many thick fibres.

The leaves riſe in a little cluſter ſix or eight together and are of a very pretty ſhape. They are pinnated, but in a ſingular manner, the ſeveral pairs of ſmall leaves on the ſides bearing no proportion to the odd one at the end, which is large and rounded. There are three or four of theſe pairs, and they are ſmall, broad, and obtuſe. The colour of the whole leaf is a pale green, and it is ſomewhat hairy.

The ſtalk is round, firm, hard, upright, and branched. There ſtand irregularly on it ſeveral leaves. They have a couple of broad, ſhort ſegments at the ſtalk; and at the extremity are divided into three parts, and are deeply ſerrated.

The flowers are ſmall and yellow, and have threads of a paler colour in the centre.

The ſeeds ſtand in a large button, naked, and furniſhed with hooked points.

It is common in paſtures and under hedges; and flowers in June.

Authors deſcribe it under the name of *caryophyllata vulgaris*; in Engliſh we call it *avens* and *herb bennet*.

It poſſeſſes the virtues of the tormentill, but is more a cordial, and ſudorifick with leſs aſtringency. The root in powder, is good in fevers attended with diarrhœas. Ten grains is a doſe. An infuſion made by pouring a pint of boiling water on half an ounce of it cut to ſlices, is an excellent ſudorifick. The powder of the root in a doſe of half a dram, repeated in the manner of the bark, will frequently cure agues, where the bark itſelf, through ill management, has failed.

The phyſician often meets with patients who are ſo averſe to the bark that they will not touch it: theſe home-produced remedies ſhould then be tried, for they will generally ſucceed.

2. Purple Avens.

Caryophyllata flore purpureo.

The root is oblong, irregularly ſhaped, and lies obliquely under the ſurface: it is black on the outſide, paler within, and has many thick black fibres. Its taſte is auſtere and bitteriſh.

The leaves riſe in little cluſters, and ſtand on ſhort pedicles. They are compoſed each of ſeveral pairs of ſmall pinnæ, and a large rounded leaf at the end. They are notched rudely and irregularly at the edges, and are a little hairy. At firſt they are of a pale, afterwards of a brownish green; and in ſome places, but not in all, they have a pleaſant ſmell: this variation is perceived alſo in the roots of the other kind, which are very fragrant in ſome places, and little ſo in others.

The ſtalks are numerous, round, hairy, and robuſt: they are a foot or more in height, and divide into many branches. Their leaves are ſmall, notched, hairy, and diſpoſed irregularly.

The flowers are ſmall, ſtriated, and purple. They grow in a pendent manner on the tops of the branches, or on little bending, hairy footſtalks riſing from them toward the top. They ſeldom open perfectly. Their colour is a deep purple on the

Barren Strawberry

Common Strawberry

Common Cinquefoil

Silver leavd Cinquefoil

Little Rough Cinquefoil

Upright Cinquefoil

White flowerd Cinquefoil

Silky Cinquefoil

Yellow alpine Cinquefoil

Strawberry Cinquefoil

Thick leavd marsh Cinquefoil

Many leavd Pentaphylloides

Silverweed

Tormentill

Common Avens

Purple Avens

Single white flowerd Avens

Unquiculated Avens

Avens with an upright single flower.

Pepe sculp

the outside, and paler within; and they have a pleasant smell. They consist each of five petals, and have a tuft of threads with yellow buttons in the centre: and they stand in a spreading, purple kind of cup, very beautiful. This is formed of five leaves of the entire cup of the flower, which, as in the others before described, consists of five larger, and five smaller.

The seeds grow in a naked head, and this stands on a longish pedicle. They have hairs hanging from them in the same manner as the others.

It is a native of Britain; but not common. It has been found about Settle in Yorkshire, and on Snowden hill in Wales, and, as is said, in Essex. It is by some called *mountain avens*, and by others *water avens*, its place being naturally in bogs on the tops of hills.

C. Bauhine calls it *Caryophyllata aquatica nutante flore*, and J. Bauhine *Caryophyllata aquatica flore striato*. Others, *Caryophyllata montana purpurea*.

3. Avens with a single white flower.

Caryophyllata flore albo solitario.

The root is long, browniſh, with a tinge of red, and of a woody substance. It spreads under the surface, and sends up leaves in many places, in separate tufts.

These stand on long and slender footstalks; and are oblong, of a deep green, and pointed at the ends.

The stalks are hard, woody, and lie upon the ground. They are four or five inches long, and have the same sort of leaves on them, but smaller. They are harsh to the touch, and white underneath; as are also those from the root.

The flowers are large, white, and very beautiful. They resemble those of the common strawberry, but that they are larger. They stand singly on long, slender, hairy footstalks, and have a tuft of threads in the middle.

The seeds stand in naked heads, furnished with long and feathery filaments; so that they resemble those of the pasqueflower.

It is not uncommon in Ireland, particularly in Galway. It flowers in June.

Morison calls it *Caryophyllata alpina chamædryos folio*. C. Bauhine, *Chamædrys alpina cisti flore*.

4. Cinquefoil avens.

Caryophyllata pentaphyllea.

The root is a tuft of numerous, brown, thick fibres rising from a small head: of a fragrant smell, and aromatick taste.

The leaves arising from it, stand on long, hairy footstalks. They are divided deeply into five parts, sometimes into seven, in the manner of the tormentill leaves; and are of a pale green and hairy. The several segments are narrow, pointed at the ends, and notched at the edges.

The stalk is round, hairy, and a foot high.

The leaves stand irregularly on it, and are divided into five parts, in the manner of those at the bottom. These segments are narrow, hairy, and serrated.

The flowers are small and yellow. They consist each of five leaves, with a tuft of threads in the centre; and stand on the tops of the branches.

The seeds follow in a naked, small head, and have hairs hanging to them like those of the common avens, but more tender and soft.

It is found in some parts of Scotland; and flowers in May.

J. Bauhine calls it *Caryophyllata pentaphyllea*. C. Bauhine, *Caryophyllata alpina quinquefolia*.

DIVISION II. FOREIGN SPECIES.

1. Avens with upright single flowers.

Caryophyllata flore erecto solitario.

The root is oblong, thick, and of an irregular shape. It runs obliquely under the surface, and is edged with fibres. Its colour is black, and its smell aromatick.

The leaves rise four or five together, and stand on short footstalks. They consist each of three or four pairs of short, blunt pinnæ, and a large leaf at the end. This is divided grossly into three parts. Upon the whole, it has a rounded shape, and it is irregularly notched. The whole leaf is of a shining green; and the footstalk is hairy.

The stalks are round, upright, green, and a little hairy. Their leaves are hairy, more divided and notched than those at the bottom; and they stand irregularly.

The flowers stand singly on long, slender footstalks; and are yellow, large, and beautiful. They are bigger than the flowers of cinquefoil; and have a tuft of threads in the centre.

The seeds ripen in a small cluster, and have threads hanging from them; but these are much softer and finer than the threads of the other kinds.

J. Bauhine calls this *Caryophyllata montana flore magno luteo*. C. Bauhine, *Caryophyllata alpina lutea*.

It seems to possess the virtues of the common avens in a very powerful degree.

2. Creeping Avens with finely divided leaves.

Caryophyllata foliis incisis caule repente.

The root is long, brown, slender, divided into branches, and beset with fibres.

The leaves stand on short footstalks; are divided into a number of small parts, which are obtuse, short, and notched at the edges.

The stalks are weak and low; they are a little hairy, and usually lie upon the ground. They have about four leaves on them, and these smaller than those from the root; otherwise alike, except that the divisions are finer.

On the tops of the stalks stand the flowers. They are large, yellow, and very beautiful. One usually stands on the top of each stalk. They are composed of an uncertain number of leaves, and have a tuft of threads in the centre.

The seeds stand in a small, naked head; but they have fine and soft hairs growing from them.

It is a native of the cold mountainous parts of Switzerland, and other parts of Europe. It flowers in June.

The virtues are probably the ſame with thoſe of the others: but it ſtands particularly recommended as a vulnerary.

Barrilier calls it *Caryophyllata alpina tennui folia incana flore luteo longius radicata.* C. Bauhine, *Caryophyllata alpina apii folio.*

GENUS VII.

PASQUEFLOWER.

PULSATILLA.

THE flower conſiſts of ſix petals; and the ſeeds are furniſhed with downy threads. There is a kind of leafy cup which ſtands remote, but belongs to the flower.

This is one of the *polyandria polygynia* of Linnæus; but it is properly of the ſame claſs with the precedent: nature has joined it to them by plain characters, tho' Linnæus ſeparates it upon ſmall variations. In this claſs it properly connects the avens and anemone; its ſeeds being furniſhed with a hairy or thready matter, tho' finer and more delicate than that of thoſe robuſt plants.

We ſhall only interpoſe between this and the anemone, a genus nearly allyed to it, that of the clematis, which, tho' very different in the ſubſtance of the ſtalks and manner of growing, yet perfectly reſembles it in the feathered ſeeds.

Linnæus, in his *Genera Plantarum*, allows the *pulſatilla* to be a diſtinct genus; but in his *Species Plantarum*, ſince publiſhed, he makes it only a ſpecies of anemone. We ſee here a ſecond inſtance of what was before obſerved, that the fondneſs for making new diſtinctions gets the better of this author's earlier knowledge. The particular remote cup, we have mentioned in the characters of this genus, diſtinguiſhes it ſufficiently, as ſuch, from the anemone; and this author himſelf once thought ſo. At preſent, he not only includes this, but among the hepatica alſo, the ſpecies of anemone: thus, taking away the uſe of thoſe antient and univerſally received names, and calling the plants by that of the anemone, from which they are ſufficiently diſtinguiſhed.

Of the ſpecies of *paſqueflower* there is but one a native of Britain.

DIVISION I. BRITISH SPECIES.

Paſqueflower.

Pulſatilla.

The root is large, long, and thick; it is frequently divided into ſeveral heads, and they are tufted with the remains of decayed footſtalks of leaves. The colour is blackiſh, and the taſte bitter and acrid.

The leaves ſtand on footſtalks of four inches long, and are beautifully divided into a number of ſmall parts. Theſe footſtalks are rediſh at the bottom, hairy, and moderately thick. The leaves alſo are hairy, and of a thick ſubſtance.

The ſtalk is round, hairy, hollow, and weak. While it ſupports the flower it is about ſix inches in height; but when that is fallen, it ſhoots up to a foot. This ſeems a proviſion of nature for ſcattering of the ſeeds, the wind having more power upon them, as they ſtand higher. There are no leaves on this ſtalk except one, which we have there called a ſort of cup to the flower. This ſtands always in one certain place, which is a little below the flower; and is divided into many ſmall parts, and is very hairy. This leaf ſurrounds the ſtalk at its baſe, and is there of one entire piece, its diviſions beginning at a little diſtance above.

The flower ſtands on the top of the ſtalk, and each ſtalk has only one. It is large, purple, hairy without, and ſmooth within; and is compoſed of ſix petals, which are pointed at the ends. It has little ſmell, but that is very agreeable. In the centre ſtands a tuft of threads with yellow heads, ſurrounding a button, which afterwards becomes the head of ſeeds, covered with long, ſilvery hairs. When the plant is in ſeed the leaf which ſerved as a cup, ſtand on the middle of the ſtalk; for the ſtalk grows in length only in the upper part.

It is found wild on Gogmagog hills in Cambridgeſhire, and in ſome parts of Lincolnſhire, and Yorkſhire; and flowers in April.

J. Bauhine calls it *Pulſatilla purpurea cærulea.* C. Bauhine, *Pulſatilla folio craſſore et majore flore.*

DIVISION II. FOREIGN SPECIES.

1. Pinnate-leaved Paſqueflower.

Pulſatilla foliis pinnatis.

The root is long, black, large, and divided into many heads.

The leaves ſtand on footſtalks of four inches long, and are compoſed of ſeveral pairs of obtuſe pinnæ divided deeply at the edges. They are of a firm, hard ſubſtance, a pale green colour, and hairy.

The ſtalk is five inches high, hollow, weak, and hairy. The flower is remarkably large, and ſtands ſingle at the top, each ſtalk bearing but one. It is compoſed of ſix long and broad petals, and has a great tuft of threads in the centre. Under it there ſtands ſuch a ſingular leaf, as in the common *paſqueflower*, forming a kind of cup.

The flower ſtands erect; but is uncertain in colour. It is moſt uſually of a pale yellow: ſometimes it is of a deeper yellow, and ſometimes white. Theſe are leſs remarkable variations; for we ſee many flowers changing, according to the culture or natural accidents, from a very deep colour, through all the gradations of the ſame colour into white; but what is ſingular in this, is that the flower is ſometimes alſo purple, the whole plant remaining in other reſpects exactly the ſame.

It is a native of Switzerland, and ſome parts of Germany, where it lives in the moſt barren foreſts; but the flower is not ſo conſiderable there as in our gardens. It flowers in ſpring.

C. Bauhine calls it *Pulſatilla apii ſolio vernalis flore majore.*

2. Small-flowered Paſqueflower.

Pulſatilla flore minore violaceo.

The root is long, thick, dark coloured, acrid to the taſte, and furniſhed with large fibres.

The leaves ſtand on ſhort footſtalks, and are divided into numerous very long and very narrow ſegments. Their colour is a faint green; and their footſtalks, towards the bottom, are purpliſh.

The ſtalks are numerous, and each ſuſtains a ſingle flower. They are hairy, and altogether without leaves except one at the upper part, which, as in the other ſpecies, ſurrounds the ſtalk at its bottom; and upwards dividing into numerous, fine ſegments, ſtands as a kind of cup to the flower.

The flower itſelf is ſmall, and hangs downward. It is compoſed of ſix oblong, narrow pointed leaves, whoſe tops turn up. Its colour is a deep violet blue, almoſt black.

The ſeeds follow in a cluſter, and are covered with fine ſilvery down.

It is a native of the northern parts of Europe, and flowers in April.

J. Bauhine calls it *Pulſatilla flore cæruleo clauſo*, and C. Bauhine *Pulſatilla flore minore nigricante.*

GENUS VIII.

CLIMBER.

CLEMATIS.

THE flower of *clematis* conſiſts of four petals, and has no cup: and the ſeeds have long appendages reſembling feathers.

Linnæus places this among the *polyandria polygynia*, uniting with it, under the ſame name, the flammula and viticella; although, according to his own account, they differ plainly; the flammula in the number of thoſe parts, he makes eſſential to the generical character: thoſe he calls *clematis* having a great number of piſtils, and the flammula but eight.

DIVISION I. BRITISH SPECIES.

1. Travellers joy.

Viorna.

The root is brown, thick, and full of fibres.

The firſt leaves are ſmall and ſlightly divided.

The ſtalks are thick, hard, woody, of an angular ſhape, and the younger ones hairy, and often rediſh. The others have a white rind; and they are very tough, and formed for twiſting round every thing they come near.

The leaves ſtand two at a joint, and are pinnated; each conſiſting of two pairs of ſmaller leaves, and an odd one at the end of the ſtalk.

Theſe are oval, ſlightly ſerrated, and pointed at the end. Their colour is a pale green, and their ſubſtance firm.

The flowers are white. They ſtand in tufts, and are ſmall: each is compoſed of four leaves, whitiſh, and of a ſweet ſmell. In the centre is a tuft of threads; and, when the ſeed ripens, it ſtands in a naked cluſter, bearded with fine long ſilvery hairs.

It is frequent in our hedges, and flowers in July.

J. Bauhine calls it *Clematis latifolia, ſive atragene quibuſdam.* C. Bauhine, *Clematitis ſylveſtris latifolia.*

Authors have deſcribed two or three accidental varieties of this plant, under the name of diſtinct ſpecies.

We ſee the leaves ſometimes undivided, and ſometimes broader than is uſual. The *Clematitis ſylveſtris latifolia*, and *Clematitis latifolia integra*, of C. Bauhine, are only two of theſe varieties. Theſe are not unfrequent in our hedges among the common kind: but we have only this one Britiſh ſpecies.

DIVISION II. FOREIGN SPECIES.

1. Spaniſh Viorna.

Clematis Bætica.

The root is long, not thick, woody, brown, and of an acrid taſte.

The firſt leaves are ſimple, and undivided. They much reſemble thoſe of the pear-tree, only they are indented at the edge.

The ſtalks are very ſlender, and of a vaſt length, whitiſh, woody, and with an uneven rind.

The leaves ſtand three, four, five, or more, at a joint. They are of an oval ſhape, and dented at the edges; and each has its ſeparate, longiſh, and ſlender pedicle. They are of a firm ſubſtance, and ſhining green.

At the ſame joints where theſe ſtand, there grow conſtantly two tendrils; one parts each way from the ſtalk; and they are very firm and tough. Theſe lay hold of any thing to ſupport the plant, and the leaves ſeem to riſe from their boſom.

The flowers are ſmall and whitiſh, and the ſeeds have a long beard of ſilvery down.

It is a native of Spain, and other warm parts of Europe, where it covers whole trees. It flowers in June, and its ſeeds ripen in Auguſt.

J. Bauhine calls it *Clematis Bætica cluſii*, and C. Bauhine *Clematis peregrina foliis pyri inciſis.*

The foreign and Britiſh *clematis* agree in their nature and qualities as well as form. They are acrid, and too ſharp for internal uſe; but an oil made of the leaves, infuſed in oil of olives, is eſteemed good in the ſciatica.

GENUS

GENUS IX.

WINDFLOWER.

ANEMONE.

THE flower of the *anemone* is large, and conſiſts of an uncertain number of petals with a great tuft of ſhort threads in the centre. There is not that ſingle and particular leaf at ſome diſtance under the flower, which is ſeen in the pulſatilla; but the leaves naturally ſtand in a regular order about the middle of the ſtalk, three riſing together.

Linnæus places this among the *polyandria polygynia*. In his *Genera Plantarum* it ſtands ſeparate from the pulſatilla; but in his ſucceeding works he has joined them, as we have obſerved, under that article.

The Engliſh name of this genus is *wind-flower*; but it is diſuſed, and we have adopted the Latin word entirely.

DIVISION I. BRITISH SPECIES.

1. White Wood-Anemone.

Anemone nemorum alba.

The root is thick, oblong, and creeps irregularly under the ſurface. While young, it is yellowiſh; when older, of a rediſh brown; whitiſh within, furniſhed with many fibres, and of an auſtere and very acrid taſte.

The leaves that riſe immediately from the root ſtand on long ſlender footſtalks, and are large and beautifully divided. The footſtalk is purpliſh, and ſomewhat hairy, and the diviſions of the leaf large and indented.

The ſtalk is ſlender, weak, round, and eight inches high. It is purpliſh at the bottom, and green upwards.

The leaves grow with regularity upon it. They are three: they all riſe from the ſame place, and ſtand on moderately long footſtalks. They are beautifully divided, and their footſtalks are rediſh, and ſomewhat hairy. The place of theſe is a little higher than the middle of the ſtalk; and from this it is again naked to the top.

The flower ſtands ſingle on the top of the ſtalk. It conſiſts of ſix oblong and large leaves, and has a tuft of threads with yellow heads in the centre. Its colour is uſually white, often rediſh, or with more or leſs of a purpliſh tinge.

The ſeeds follow in a button or little cluſter, which is rough, each ſeed having a hooked ſhort beard.

It is a native of England, and common in woods. It flowers in April.

J. Bauhine calls it *Ranunculus phragmites albus & purpureus vernus.* C. Bauhine, *Anemone nemoroſa flore majore.*

Its virtues are unknown; but there is ſuch an acrid taſte in every part of it, that it would ſeem unſafe to try it internally.

A ſmall winged inſect is apt to depoſit its eggs on the underpart of the leaves of this ſpecies; and they ſomewhat reſemble the round dots in which the ſeeds of fern are lodged. A leaf of it thus decorated is unluckily repreſented in a figure in the laſt edition of Ray's Synopſis. The form, ſubſtance, and diſpoſition of theſe dots ought to have informed the botaniſt they were not ſeeds. It is a juſtice we owe the memory of Mr. Ray to obſerve, that although this error ſtands in a work authoriſed by his name, it is not to be charged to his account. The deſcription p. 124. and figure, tab. 3. of that work, are both added by the late Dr. Dellenius, botanical profeſſor at Oxford, who ſaw the plant under the name of a fern in the collection of Bobart. He therefore was the perſon firſt impoſed upon. The plant was given him, whether ignorantly or in wantonneſs, by a perſon whom he calls the Conjurer of Chalgrave.

2. Large-leaved Wood-Anemone.

Anemone foliis majoribus flore violaceo.

The root is long, ſlender, irregularly ſhaped, and ſpreads under the ſurface; the colour is a deep brown, and the taſte more fiery and acid than the laſt.

The leaves ſtand on footſtalks two inches long, and reſemble thoſe of the *common wood-anemone* in form, ſize, and diviſion. The footſtalks are purple at the bottom, and the leaves of a ſhining green.

The ſtalk is five inches high, round, ſlender, purple toward the bottom, and weak.

The leaves on the ſtalk are three. They all grow from the ſame ſpot, aud have ſcarce any footſtalk. They are large, and of a beautiful green. They are divided into three large parts, and then deeply into ſeveral ſmaller.

The flower ſtands ſingly at the top of the ſtalk, and has no cup. Its colour is a deep violet blue; and it has a great tuft of yellow threads in the centre. The petals are oblong, and obtuſe at the end. Their number is uncertain, from ſix to twelve or fifteen; in which later caſe they are very narrow.

This is a ſort of doubling of the flower, but it is natural to it often without culture, and alſo to the common white wood kind.

The ſeeds ſtand in a ſmall rough cluſter.

It is a native of moſt of the cold parts of Europe. I have found it in Charleton foreſt, and in one of the places mentioned in Mr. Ray's Synopſis, in Surry.

Mentzelius calls it *Ranunculus numeroſus flore cæruleo foliis majoribus Apenini montes.*

DIVISION II. FOREIGN SPECIES.

1. Fine-leaved red Anemone.

Anemone tenuifolia flore rubente.

The root is large, thick, and of an irregular form.

The leaves are numerous: they riſe from ſeveral heads of the ſame root, a cluſter from each; and have footſtalks of two or three inches in length. They are large, and in the whole of a ſomewhat triangular form. Each is divided into three principal parts, two at the bottom, and one at the end; and theſe are again deeply indented.

The ſtalk is robuſt, purpliſh near the bottom, and ten inches high.

Toward its middle there ſtand three leaves, all growing from one place; and they are ſmall, and have no footſtalks. They reſemble the ſeparate diviſions of the lower leaves.

The flower is ſingle, large, and of a pale red: not rarely it is white, or very faintly tinged: but red is the natural colour. It is compoſed of ſix leaves, and has a large tuft of threads in the middle.

The ſeeds ſtand in a ſmall naked button.

It is a native of the Eaſt, and flowers in the ſpring.

C. Bauhine calls it *Anemone tenuifolio ſimplici flore.*

We had it originally from Conſtantinople; and it is raiſed to great beauty, and with great variety in our gardens, by being made double, and of a variety of colours, from the deepeſt red with a purple tinge, to the paleſt fleſh colour.

2. Trifoliate Anemone.

Anemone trifolia.

The root is long and ſlender, and ſpreads under the ſurface of the ground, dividing into ſeveral parts, and ſending up leaves from many heads. Its colour is brown, its taſte acrid, and it has many fibres.

The leaves ſtand three on each footſtalk; and are of an oval figure, pointed, ſerrated, and without ſeparate footſtalks; adhering by their baſe to the top of the ſtalk riſing from the root, which is three inches long, ſlender, and purpliſh.

The ſtalk is ſix inches high, round, weak, and purpliſh.

The leaves are three on this ſtalk. They all riſe from the ſame point, and have long footſtalks, each conſiſting of three other diſtinct leaves, and in all reſpects reſembling thoſe that riſe immediately from the root.

The flower is large and beautiful. It is white, with a bluſh of purple, and reſembles the flower of the *common wood-anemone.* It is compoſed of ſix petals, with a tuft of threads in the centre.

The ſeeds follow in a naked head.

It is a native of France, and ſome other parts of Europe, and flowers in ſpring.

C. Bauhine calls it *Anemone trifolia flore albo.*

GENUS X.

PLEASANT EYE.

ADONIS.

THE flower of the *adonis* conſiſts of an uncertain number of petals, with a tuft of extremely ſhort threads in the centre: the ſeeds ſtand naked in a longiſh head; and the leaves are divided into fine ſegments.

Linnæus places it among the *polyandria polygynia*; and he very juſtly reduces to this genus that plant commonly known by the name of *fine-leaved black hellebore.* That is indeed a ſpecies of *adonis*; and they were guilty of introducing confuſion into the ſcience who called it by the name of another genus, to which it by no means belongs. Linnæus deſerves praiſe, that he calls this a ſpecies of *adonis*; and it were to be wiſhed he had not admitted the real black hellebores into the ſame claſs.

DIVISION I. BRITISH SPECIES.

1. Common Adonis.

Adonis radice annua.

The root is long, ſlender, whitiſh, and furniſhed with large fibres.

The firſt leaves are large, divided into a great number of ſmall and fine ſegments, and placed on footſtalks of two inches long. They are of a pale green colour, and tender ſubſtance.

The ſtalks are round, ſtriated, green, and a foot and half high. They divide into many branches, and ſtand tolerably upright.

The leaves grow on them irregularly, and are like thoſe which riſe from the root, but ſmaller.

The flowers ſtand at the tops of the branches: they are moderately large, and of a beautiful ſcarlet colour; and are compoſed of an uncertain number of petals, with a bundle of threads, having deep purple heads, in the centre.

The ſeeds ſtand naked in a longiſh cluſter.

It is common in ſome parts of England in corn-fields, and flowers in Auguſt; it is no where ſo frequent as in Kent and Suſſex.

C. Bauhine calls it *Flos adonis vulgo aliis eranthemum*; others *Adonis*, and *Flos adonis.*

The flower is ſometimes of a purpliſh colour, and the leaves are ſometimes longer than in the common ſtate of the plant. Theſe are varieties only; but they have been deſcribed as ſeparate ſpecies.

It has not been any where much uſed in medicine. Some recommend an infuſion of the flowers in wine for cholicks; but there are many better remedies; and this wants the authority of more experience.

DIVISION II. FOREIGN SPECIES.

1. Perennial-rooted Adonis.

Adonis radice perenni.

The root is compoſed of a ſmall head, divided into ſeveral parts, and furniſhed with a great number of thick fibres. It is of a deep blackiſh brown colour, and a bitteriſh and acrimonious taſte.

The firſt leaves are two inches long, and compoſed of a great number of very ſlender fine ſegments. They ſtand on ſhort footſtalks, and are of a duſky green colour.

The ſtalks are numerous, ſtriated, ſlender, and eight inches high.

The leaves ſtand irregularly on them, and they reſemble thoſe from the root; but they are ſmaller. They have a bitteriſh taſte, and when rubbed an unpleaſant ſmell.

The flowers ſtand at the tops of the ſtalks; and are large, beautiful, and yellow. They conſiſt each of ſixteen ſtriated petals, indented, and often turning back at the points.

The ſeeds ſtand in an oblong cluſter, large, and naked.

It is a native of Bohemia, and other parts of Europe, and flowers in July.

C. Bauhine calls it *Helleborus niger tenuifolius baphthalmi flore:*

The root reſembles that of black hellebore in aſpect; whence the plant, though altogether unlike, obtained that name. It is acrid and poiſonous: it has ſometimes been ſold in the ſtead of black hellebore, or mixed among black hellebore, and, it is ſaid, with fatal conſequences.

It has the ſharpneſs of the moſt violent of the crow-foots, and its juice will eat away warts.

2. Great flowered Adonis.

Adonis flore maximo.

The root is compoſed of a ſmall head, and a vaſt number of long and thick fibres. It is black, and of an acrid and diſagreeable taſte.

The firſt leaves are ſmall: they have very ſhort footſtalks, and are divided into a few ſlender long ſegments. Their colour is a pale green, and they are of an acrid taſte.

The ſtalks are ſhort, thick, and fleſhy: they have large joints, and at each one leaf divided into very narrow, but not numerous ſegments.

The flower is yellow, very large for the bigneſs of the plant, and ſtands at the top of the ſtalk. It is compoſed of ſeveral petals, and has a large tuft of paler yellow threads in the centre.

The ſeeds ſtand in a naked oval head. It is found in ſome parts of Germany, and flowers in July and Auguſt.

Mentzelius calls it *Helleborus niger ſerulaceus, ſeu Pſeudohelleborus caule geniculato flore mago inſtar tulipæ.*

Its virtues are unknown.

GENUS XI.

MOUSETAIL.

MYOSUROS.

THE flower conſiſts of five ſmall petals, and is placed in a five-leaved cup. The ſeeds ſtand naked in a long head; and the leaves are graſſy.

Linnæus places this among the *pentandria polygynia*, ſeparating it, by many claſſes, from the *ranunculus*, *adonis*, and other of the plants belonging to this, although he acknowledges it is very nearly allied to them *.

This may ſhew the imperfection of his method, even upon his own confeſſion. The reaſon of his ſeparating this plant from the others, is that there are in them great tufts of threads in the middle of the flower; and in this only five. Let us appeal to nature, whether this plant, which agrees with the others of the preſent claſs in the form and ſtructure of its flower, and in the ſingular diſpoſition and arrangement of its ſeeds, ſhould be taken from among them, and placed in a far diſtant claſs, only becauſe the filaments or threads in the flower are in a ſmaller number. Reaſon declares utterly againſt this; nor is there the juſt authority of obſervation for placing it in any other. This author, though, from its having five filaments, he has ranked it among the *pentandria*; yet is obliged to confeſs, that the number of thoſe threads is ſubject in this genus to great variation †.

This acknowledgment not only ſhews he has put the preſent plant out of its place, but ſhakes the very foundation of his method: for it depends upon the numbering of theſe filaments. In the arrangement we have made of theſe ſeveral genera, the *mouſetail* appears plainly to belong to them, and to have its proper place. We have given the diſpoſition of the ſeeds in a naked head, as the great character of the claſs; and in ſome that head is ſhorter, in others longer. In moſt of the genera firſt named here it is round; in the adonis it is oblong and thick; and in the *mouſetail*, which we place next, it is long and thin. There is no more difference.

Of this genus there is but one known ſpecies, and that is a native of England.

* Myoſuri ſumma eſt affinitas cum ranunculo.

† Numerus ſtaminum in hoc genere valde variat. Linn. Gen. Plant 311

Mouſetail.

Myoſuros.

The root is compoſed of a great number of whitiſh fibres.

The leaves are very numerous. They riſe in a thick tuft, and reſemble the ſhoots of graſs. They are three inches long, extremely narrow, and ſmalleſt toward the bottom, for they grow ſomewhat broader toward the end; they are of a freſh green, and ſoft.

The ſtalks are numerous alſo: they riſe from the centre of the tuft of leaves, and are round, ſlender, naked, and of a pale green.

At the top of each ſtands a ſingle flower; which is ſmall and greeniſh, compoſed of five little petals, and ſtanding in a cup compoſed of five leaves alſo, which though ſmall are ſomewhat larger than the flower. In the centre ſtand ſeveral threads in an uncertain number, and on their tops are placed oblong buttons.

When the flower is fallen, the ſeeds appear placed with great regularity in a long and ſlender head, the whole reſembling the tail of a mouſe; whence the plant has been named.

It is not uncommon in dry places: about Paddington we have it in abundance.

It flowers in May. Authors call it *Myoſurus*, and *Cauda muris*.

The taſte of the whole plant is fiery and acrid: in this alſo it agrees with the crowfoot kind. Its virtues are not known; but it appears one of thoſe plants which are not to be given internally.

GENUS XII.

CROWFOOT.

RANUNCULUS.

THE flower conſiſts of five petals, with a tuft of ſhort threads in the centre, and ſtands in a cup compoſed of five leaves: the ſeeds ſtand naked, and in roundiſh cluſters

Linnæus places this genus among the *polyandria polygynia*, and ſpeaks with great warmth of the confuſion and uncertainty to which it was liable, till he diſcovered the nectarium of the flower. It appears to me, on the contrary, that this, though an ingenious and curious obſervation, is not of great uſe; that the genus is ſufficiently diſtinct without it, and little liable to any other confuſion than ſuch as may ariſe from learned trifling.

The parts of fructification in this genus, Linnæus obſerves, are always inconſtant and uncertain: He means that the filaments in the middle of the flower are ſo. This is not ſingular in crowfoot: we have juſt ſhewn it is ſo in mouſetail, and ſhall ſhew the ſame in many others. If any thing is to be inferred from this, it is, that theſe, though the foundation of that author's ſyſtem, are, upon his own confeſſion, unfit for ſuch a purpoſe. The characters we eſtabliſh from the flower in general, and the ſeed, are not ſubject to this inconſtancy or irregularity; and therefore they are more proper.

The nectarium which that author here calls in to the aſſiſtance of his diſtinctions, is a little Hollow, ſometimes open, ſometimes cloſed up, in the bottom of every petal of the flower.

We ſhall ſee by this, and numerous other inſtances, that a method founded more on the obvious parts of plants is leſs liable to uncertainty, and more agreeable to the diſtinctions made by nature.

DIVISION I. BRITISH SPECIES.

1. Round-rooted Crowfoot.

Ranunculus radice rotunda.

The root is a ſmall round head, with ſome whitiſh fibres. Its colour is whitiſh or rediſh, and its taſte inſufferably acrid.

The leaves that riſe from the root are large, broad, and divided into three parts, each of which is again deeply notched: they ſtand on long footſtalks, and are of a pale green.

The ſtalks are round, upright, and branched.

The leaves that grow on theſe are ſmall and divided into a few deep ſegments.

The flowers are large, and of a beautiful yellow. They are compoſed each of five rounded petals, and have a tuft of threads in the centre.

The ſeeds ſtand naked in a ſmall head.

It is common in our paſtures, and flowers in May.

C. Bauhine calls it *Ranunculus pratenſis radice verticilli modo rotunda.* J. Bauhine, *Ranunculus tuberoſus major.*

2. Common creeping Crowfoot.

Ranunculus pratenſis repens vulgaris.

The root is compoſed of a great tuft of whitiſh fibres hanging from a very ſmall head.

The leaves that riſe from it are large, deeply divided at the edges, and often ſpotted. Each is compoſed as it were of three diſtinct parts. The colour is a dead green, and they are ſomewhat hairy: they ſtand on long hollowed footſtalks.

The ſtalks are ſlender and weak: ſome run upon the ground, and take root at the joints; others are more erect, and ſupport the flowers.

The leaves on theſe are ſmall, and deeply divided.

The flowers are large and yellow.

The ſeeds follow in naked heads.

It is common in meadows, and flowers in May.

C. Bauhine calls it *Ranunculus pratenſis repens hirſutus.*

3. Pale-leaved Crowfoot.

Ranunculus foliis pallidioribus hirſutis.

The root is compoſed of fibres.

The leaves ſtand on long hollow footſtalks, and are divided into three parts, and each deeply indented: they are large, hairy, and of a pale green.

The ſtalk is two feet high, upright, firm, and

a pale green. The leaves on it are small, and deeply divided.

The flowers are large, and of a fine glossy yellow, and have tufts of yellow threads in the middle.

The seeds stand naked in a small roundish cluster.

This greatly resembles the *common creeping crowfoot*; but its stalks are all erect, and it does not root at the joints. The leaves also are paler and more hairy, and the flowers larger than in that species.

It is frequent in wet places near the sea, and flowers in May.

J. Bauhine calls it *Ranunculus rectus foliis pallidioribus hirsutus.*

4. Tall Crowfoot.

Ranunculus erectus foliis multifidis.

The root consists of fibres, thick, numerous, and whitish.

The leaves that rise from it are large, and of a pale green: they stand on very long footstalks, and are each deeply divided, not into three parts, as those of the three preceding species, but into five, seven, or more; and these are again deeply indented. The whole leaf has a figure nearly rounded.

The stalk is round, firm, upright, and three feet high.

The leaves on it are divided into smaller parts, and fewer than those from the root.

The flowers are numerous, moderately large, and yellow.

The seeds stand in small roundish naked heads.

It is common in pastures, and flowers in June.

C. Bauhine calls it *Ranunculus pratensis erectus acris*; and most others have followed him.

5. Little flowered Crowfoot.

Ranunculus hirsutus annus flore minimo.

The root is a tuft of small fibres rising from a little head.

The leaves which rise from it are small, hairy, and of a pale green. They stand on footstalks an inch and a half long, and are cut deeply into three parts, though not down to the stalk. These divisions are also notched at the edges.

The stalks are numerous, slender, weak, and hairy: they lie upon the ground, or rise but weakly from it.

The leaves on them stand irregularly, and are altogether like those from the root, but smaller.

The flowers are very small, and of a faint yellow, and the leaves of the cup frequently appear between them: there is a little tuft of threads in the centre. The flowers are seldom seen entire, the petals adhering but weakly at their base.

The seeds are small, and stand in a little cluster.

It is common on dry banks, and flowers in June.

Plukenet calls it *Ranunculus hirsutus annus flore minimo.* Morison, *Ranunculus arvensis hirsutus annus flore omnium minimo.*

Linnæus thinks this the same with the third foreign species; but it is quite distinct.

6. Wood-Crowfoot.

Ranunculus nemorosus foliis subrotundis.

In many of the *crowfoots* the leaves which grow on the stalk differ greatly from those that rise from the root; but in none so much as this.

The root is a tuft of long slender whitish fibres, of a less acrid taste than the others.

The leaves that rise from it stand on very long footstalks. they are of a roundish figure, often entire, sometimes divided more or less deeply into five or more parts, and always notched at the edge.

The stalks are tolerably upright, round, weak, and a foot and a half high: they are divided into many branches, and support many flowers.

The leaves on them are cut so deeply, that each appears composed of five or more long and narrow ones. These are of a pale green, and not indented.

The flowers are moderately large, and of a bright yellow.

The seeds follow in a small longish cluster.

The flower in this plant is rarely seen entire, for the petals hang very loose, and often one falls before the rest are disclosed.

It is common in shady places, and flowers in June.

C. Bauhine calls it *Ranunculus nemorosus vel sylvaticus folio rotundo.* J. Bauhine, *Ranunculus rotundifolius vernus sylvaticus.*

7. Corn-Crowfoot.

Ranunculus seminibus asperis.

The root is composed of many whitish fibres.

The leaves that rise from it are small, and very deeply divided: they stand on long footstalks, and are of a pale green.

The stalk is thick, firm, upright, and two feet high.

The leaves stand irregularly on it, and are very deeply divided into numerous, slender, pointed segments.

The flowers stand on the tops of the branches; and are of a bright yellow, moderately large, and have a tuft of threads in the centre.

The seeds stand in a small head; and are flat, large, and prickly.

It is common in corn fields, and flowers in July.

C. Bauhine calls it *Ranunculus arvensis echinatus*; and he is followed by most others.

8. Small flowered Water-Crowfoot.

Ranunculus aquaticus floribus minimis.

The root is a thick tuft of whitish fibres.

The leaves rising from it are supported on long fleshy footstalks. They are roundish, but deeply divided into three or five parts, and notched at the edges. They are perfectly smooth and glossy, and their colour is a pale yellowish green.

The stalk is very thick, fleshy, round, and divided into many branches toward the top.

The leaves on it are divided into narrower segments than those at the bottom: they are also smooth, and of a pale green.

The flowers are very small: they stand on the tops of the branches, and are of a pale yellow.

The seeds are numerous and small, and they stand in longish heads.

It

Common Pasque flower

Small flowerd Pasque flower

Travellers Joy

White wood Anemone

Spanish Vetch

Scarlet leavid wood Anemone

Fine leavid red Anemone

Trifoliate Anemone

Common Adonis

Perennial rooted Adonis

Great flowerd Adonis

Mouse Tail

Round rooted Crowfoot

Common Creeping Crowfoot

Tall Crowfoot

Little flowerd Crowfoot

Wood Crowfoot

Corn Crowfoot

H. Roberts Sculp

It is common in watery places, and flowers in June.

C. Bauhine calls it *Ranunculus paluſtris apii-folio lævis.* J. Bauhine, *Ranunculus paluſtris flore minimo.*

9. Great Spearwort.

Ranunculus latifolius ſive flammeus major.

The root is a cluſter of thick, whitiſh fibres.

The leaves riſing from it are a foot long, an inch and half broad, of a pale green, and with ſcarce any footſtalks.

The ſtalk is thick, fleſhy, erect, and three foot high.

The leaves ſtand alternately, and are eight or ten inches long, and an inch broad, ſmooth, even at the edges, and pointed at the ends.

The flowers are very large, and of a beautiful yellow. They ſtand at the tops of the branches, and have a tuft of pale yellow threads in the middle.

The ſeeds follow in large, naked cluſters. It grows in ſhallow, muddy waters in the iſle of Ely and ſome otherr places; but is not common.

C. Bauhine calls it *Ranunculus longiſolius paluſtris major.* J. Bauhine, *Ranunculus ſolio longo maximus. Lingua Plinii.*

It is a very ſtately and beautiful ſpecies.

10. Leſſer Spearwort.

Ranunculus anguſtifolius ſive flammeus minor.

The root is compoſed of many thick, whitiſh fibres.

The leaves riſing from it are long and narrow; and they ſtand on long footſtalks.

The ſtalks are numerous, fleſhy, branched, and not altogether erect.

The leaves ſtand irregularly on them; and are oblong, narrow, even at the edges, and pointed at the end.

The flowers ſtand at the tops of the branches, and are ſmall, but of a bright yellow.

The ſeeds ſtand in little, naked cluſters.

It is common about waters; and flowers in June.

C. Bauhine calls it *Ranunculus longiſolius paluſtris minor.* C. Bauhine, *Ranunculus longiſolius aliis flammula.*

The leaves of this ſpecies are ſometimes notched at the edges; in which condition it has been deſcribed by many as a diſtinct ſpecies, under the name of *Ranunculus flammeus ſerratus*; but it is only an accidental variety.

11. Ivy-leaved Water Crowfoot.

Ranunculus aquaticus hederæ folio.

The root is a tuft of white, thick fibres.

The leaves riſing from it are roundiſh, but dented in three or four places at the edges, and of a pale green.

The ſtalks riſe in the centre of this tuft of leaves, and ſpread themſelves on the ſurface of the water. They are numerous, weak, irregular in their ſhape, and jointed. From every joint there grow fibres of new roots; ſo that the original root and its leaves are preſently loſt; and the plant propagates itſelf at large, ſpreading every way, and rooting every where.

The leaves riſe from the joints of the ſtalk, and ſtand on long footſtalks. They are of a triangular figure, but obtuſe at the corners, and a little dented; ſo that they reſemble the leaves of ivy. They float on the water or lie upon the mud; and commonly have a black ſpot in the middle.

The flowers are ſmall and white. They grow on footſtalks oppoſite the leaves; and conſiſt each of five petals, with a tuft of threads in the centre.

The ſeeds follow in a cloſe, compact, ſmall, round head.

It is common in ſhallow waters; and flowers in May.

J. Bauhine calls it *Ranunculus hederaceus rivulorum ſe extendens atra macula notatus.* Others *Ranunculus aquaticus hederaceus.*

12. Various leaved Water Crowfoot.

Ranunculus aquaticus foliis rotundis et capillaceis.

The root is a tuft of long and thick fibres, which penetrate deep into the mud, or other bottom of the water.

The firſt leaves from them are ſmall, and divided into a few long ſegments; but theſe wither when the ſtalks grow up.

The ſtalks are long, hollow, thick, but weak, and divided into many branches. They are jointed at diſtances; and they float along the water.

The leaves are of two diſtinct kinds. Thoſe which are under water are of a dark green colour, and are divided into numerous very fine ſegments. Thoſe that lie upon the ſurface are entire, and roundiſh, but deeply notched. Theſe ſtand alſo on long footſtalks.

The flowers are large and white. They ſtand on long ſtalks, which riſe oppoſite to thoſe of the leaves, and are compoſed each of five petals, with a tuft of threads with yellow buttons in the middle.

The ſeed is ſmall, and ſtands in a round head.

It is common in ſhallow waters; and flowers in June.

J. Bauhine calls it *Ranunculus aquaticus tenuifolius.* C. Bauhine, *Ranunculus aquaticus folio rtoundo et capillaceo.* Others, *Ranunculus foliis variis.*

13. Fine-leaved Water Crowfoot.

Ranunculus aquaticus foliis majoribus capillaceis.

The root is a tuft of long and tough fibres.

The firſt leaves are long, and divided into very narrow ſegments; ſo that they much reſemble thoſe on the ſtalks of fennell.

The ſtalk is two foot or more in length; round, thick, but weak; and very much branched.

The leaves ſtand irregularly, and are large, but divided into multitudes of fine, narrow ſegments. Their colour is a deep green; and there are no others. The plant is commonly immerſed altogether under water; but if any part of it appear above, the leaves are the ſame with thoſe below; not various, as in the preceding ſpecies.

The flowers are ſmall and white, and have a tuft of threads in the centre with yellow buttons.

The ſeeds ſtand in little, round heads, ſmaller alſo than the former.

It is common in running, as well as ſtanding waters; and flowers in June.

Linnæus conſiders this only as a variety of the former; but their difference is eſſential. No one will doubt it who ſees them growing together. This never has any of thoſe entire, rounded leaves that float on the ſurface in the other; and the flowers are always much ſmaller.

J. Bauhine calls it *Ranunculus aquaticus omnino tenuifolius.* C. Bauhine, *Millefolium aquaticum ranunculi flore et capitulo.*

14. Tender-leaved Water Crowfoot.

Ranunculus aquaticus foliis minoribus capillaceis.

The root is a tuft of ſmall, but long, blackiſh fibres.

The firſt leaves are broad, ſhort, and placed on long footſtalks, and they are divided into minute and narrow parts.

The ſtalk riſes in the midſt, and theſe leaves ſoon after wither. This is a foot or more in height, very ſlender and weak, and has leaves ſet alternately in a conſiderable number, and they are very beautiful: they ſtand on ſhort footſtalks, and are compoſed of a multitude of very narrow parts, which are ſo placed that the whole leaf is of a rounded figure.

The flowers ſtand on long footſtalks, and they are large and white, with a tuft of yellow buttons ſupported on ſhort threads in the middle.

The ſeeds are ſmall, and ſtand in a little round cluſter.

It is common in ſhallow, ſtanding waters that have a muddy bottom, and is uſually altogether under water.

C. Bauhine calls it *Millefolium aquaticum cornutum.* Plukenet, *Ranunculus aquaticus albus circinatis tenuiſſime diviſis foliis.*

15. Fennel-leaved Water Crowfoot.

Ranunculus aquaticus foliis longiſſimis.

The root is a large tuft of thick, tough, and extremely long fibres.

The firſt leaves are very large, of a dark green, and divided into numerous narrow ſegments.

The ſtalks are numerous; they riſe in the centre of theſe leaves, which ſoon after wither. They are very long, tender, weak, round, divided into branches, and jointed. They follow the courſe of the water, and run with it to a great length.

The leaves are very large, and of a dark green. They are long, and divided into many long ſegments. They reſemble thoſe on the ſtalks of fennel; but they are longer, and the diviſions not ſo numerous.

The flowers are large and white, with a tuft of yellow buttons, ſupported on ſhort threads, in the centre.

The ſeeds are ſmall, and ſtand in a little, round, naked head.

This is diſtinguiſhed at ſight, from all the preceding kinds, by the leaves being divided into much fewer, and thoſe vaſtly longer ſegments.

It is common in large rivers; and flowers in June.

C. Bauhine call it *Millefolium aquaticum foliis fæniculi, Ranunculi flore et capitulo.* Others, *ranunculus aquaticus foliis fæniculaceis.*

DIVISION II. FOREIGN SPECIES.

1. White-flowered tall Crowfoot.

Ranunculus aconiti folio flore albo.

The root is compoſed of a multitude of thick and long fibres, growing from a ſmall head.

The firſt leaves ſtand on footſtalks four or five inches long, and are of a pale green colour when they firſt riſe, but duſkier afterwards. They are large, and deeply divided into three or five parts. Theſe are broad, oblong, pointed and ſerrated at the edges.

The ſtalk is round, thick, fleſhy, firm, and three foot high.

The leaves ſtand irregularly on it, and are like thoſe from the root; but ſmaller, of a duſky green, pointed and ſerrated.

The flowers ſtand at the tops of numerous branches, into which the ſtalk divides in the upper part. They are large and white.

The ſeeds ſtand in little, roundiſh, naked heads.

The leaves of this plant have not the firey ſharpneſs to the taſte of many others.

It is a native of the Alps and other mountainous parts of Europe, and flowers in June.

Cluſius calls it *Ranunculus montanus.* Others, *Ranunculus montanus aconiti folio flore albo.*

2. Purple Crowfoot.

Ranunculus hirſutus flore purpureo.

The root is compoſed of a great tuft of fibres; they are very long, white, and firm.

The firſt leaves ſtand on long, hairy footſtalks. They are large, of a rounded form, but divided deeply into five, ſeven, or nine ſegments. They are hairy, of a pale green, and ſerrated.

The ſtalk is a foot and half high; and is weak and ſlender; hairy, and of a pale green.

Towards its top there ſtands a leaf of a particular form ſurrounding it, without a footſtalk, and divided into ſeveral, narrow, ſerrated ſegments, pale and hairy.

From this part the ſtalk divides into three or four branches, which are ſhort, and ſlender, and each furniſhed with a little leaf or two, and with a very beautiful flower on its top, which is large, and in part purple, in part of a ſnow white.

The ſeeds ſtand in little naked cluſters.

It is a native of Germany, and flowers in June.

C. Bauhine calls it *Ranunculus montanus, hirſutus purpuraſcente flore.*

3. Low Crowfoot with prickly ſeeds.

Ranunculus annuus ſemine echinato.

The root is compoſed of a great cluſter of ſlender fibres connected to a ſmall head.

The leaves riſing from it are ſupported on ſlender footſtalks, hollowed at the bottom: they are ſmall, of a figure between rounded and triangulate, and divided deeply into three parts. They are alſo notched all about the edges.

The ſtalks are round, weak, jointed, and ten inches or a foot long.

The leaves grow irregularly on them, and reſemble thoſe from the root.

The flowers are ſmall, and yellow, with a tuft of pale threads.

The ſeeds ſtand in a little naked head; and are large and prickly.

It is a native of the warm parts of Europe, and the eaſt; and loves damp ground.

J. Bauhine calls it *Ranunculus paluſtris echinatus*. Others *Ranunculus echinatus creticus*.

4. Broad nervous-leaved Crowfoot.

Ranunclus lato et nervoſo folio.

The root is compoſed of a cluſter of very thick fibres.

The firſt leaves are five inches long, two broad, perfectly entire, and blunt at the end, with the ribs running lengthwiſe; ſo that in all reſpects they reſemble thoſe of plantain.

The ſtalk is ſingle, round, firm, and a foot high.

The leaves ſtand alternately upon it, and ſurround it at the baſe. They reſemble thoſe from the root in all reſpects, but that they are ſmaller.

Toward the top the ſtalk divides into two or three branches, and on the ſummit of each is a flower. This is very large, of a ſnow white, and has a tuft of yellow threads in the centre.

The ſeeds are ſmall, and ſtand naked in a little cluſter.

It is a native of the Pyrenæan mountains; and flowers in June.

C. Bauhine calls it *Ranunculus montanus foliis plantagineis*. C. Bauhine, *Ranunculus Pyrenæus foliis ſublongis non lacinatis flore albo*.

5. Broad-leaved Crowfoot.

Ranunculus latifolius radicibus craſſis.

The root is compoſed of a great many long, thick pieces, which form a large tuft.

The leaves that riſe from it ſtand on thick, fleſhy footſtalks, three inches long, and are broad, divided deeply into five or more parts, and ſerrated round the edges.

The ſtalk is thick, round, fleſhy, and a foot or more in height.

The leaves ſtand irregularly on it, and are divided into many narrow, indented ſegments.

The flowers are large, and yellow; and they have a tuft of yellow threads in the centre.

The ſeed follows in a ſmall head, and is large and naked.

It is a native of the eaſt, and flouriſhes particularly in Crete. It flowers in July.

C. Bauhine calls it *Ranunculus aſphodeli radice Creticus*. Cluſius, *Ranunculus Creticus latifolius*.

This *ranunculus* whoſe root approaches to the tuberous kind, naturally leads us to that which has a regularly tuberous root, and which makes ſuch a fine appearance in our gardens.

6. Scarlet Crowfoot.

Ranunculus foliis diviſis flore rubente, radice tuberoſa.

This is a beautiful flower in its plain, natural appearance; and when cultivated, it ſhews an amazing variety, the flower becoming double, and having all the degrees of colour from the deepeſt to the paleſt red, and to white and yellow.

The root is regularly tuberous. It is compoſed of ſeveral oblong or oval, thick pieces, intermixed with fibres; or ſometimes wholly without them.

The leaves that riſe from it are ſupported on long footſtalks; and are, ſome of them more, ſome of them leſs, divided. The firſt that appear are commonly oblong, and only indented deeply at the edge. The ſucceeding ones are divided more or leſs deeply into three parts; and thoſe ſegments are notched and pointed.

The ſtalk is round, firm, and a foot high; ſometimes it riſes ſingle and continues the whole way ſo: at other times it is branched.

The leaves that ſtand on it are formed of three parts, two diſpoſed in the manner of wings, and one placed at the end; and each of theſe parts is again divided into three ſegments and notched round the edges.

At the top of the ſtalk ſtands a ſingle flower, compoſed of five leaves, rounded, and very large and beautiful. The uſual colour of this is a bright ſcarlet; but ſometimes it is yellow or white. We owe to the art of gardening the other numerous variations.

It is a native of Aſia, where it covers whole fields wild, and flowers in ſpring.

C. Bauhine calls it *Ranunculus radice grumoſa ramoſus*. Others, *Ranunculus Aſiaticus radice grumoſa*.

Moſt of the botanical writers have divided this according to the colour of the flower, and other accidents, into ſeveral kinds; but they are accidental varieties, the plant in every one of theſe appearances being the ſame.

The *crowfoots* in general are acrid and cauſtick. Some of them are leſs ſo than others; and there are ſome that experience has ſhewn to be poiſonous. The greater and leſſer ſpearwort are of this laſt kind, as alſo the round-leaved ſmall flowered kind: as to the others, they have been baniſhed from any uſe on the account of theſe: but we ſhall ſee in this an inſtance how raſhly we condemn ſome plants, as well as negligently overlook others.

The acrid quality of the *crowfoots* in general reſides in their juice. Some, as has been obſerved, have little of it; and theſe may be taken internally as freſh gathered; and many of the others becoming mild when dried. A tincture may alſo be made from ſome of the common ſpecies that has no bad qualities.

In the firſt ſtate, the roots and leaves of the round rooted kind may be uſed outwardly with ſucceſs on many occaſions.

Their juice takes away warts.

The roots and leaves bruiſed together, and applied to ſwellings, will act as a cauſtick, and make way for the inſtruments of ſurgery.

In violent headachs, when the pain is confined to one ſpot, they have the greateſt effect imaginable. A plaiſter is to be laid on, with a hole in the middle. A ſmall quantity of the herb and root bruiſed, and wet with the juice, is to be laid on the bare place; and this is to be covered with a larger plaiſter. In this manner of application a few leaves will do the buſineſs. Care muſt be taken

taken not to let it come near the eyes, for it will cauſe violent inflammations.

In the gout the bruiſed leaves and roots have been uſed with great ſucceſs. We have alſo accounts of cures by them in the plague, by raiſing bliſters with them, and keeping them open in the manner of iſſues near buboes in the groin, or elſewhere.

The diſtilled water of the roots, and a tincture made from them in wine, are recommended alſo in the plague internally.

The beggars frequently make ſores on their legs with this plant, to promote commiſeration; and it is eaſy to know that what could do this might be applied uſefully on ſome occaſions.

An infuſion of the leaves of the *ivy-leaved water crowfoot* in wine, with alder-tops and ſage, is recommended ſtrongly by ſome in the dropſy, and other diſorders ariſing from obſtructions of the viſcera, and in the ſcurvy.

GENUS XIII.

PILEWORT.

CHELIDONIUM MINUS.

THE flower is compoſed of ſeveral petals, and has a three-leaved cup, which falls with it.

The ſeeds ſtand in a ſmall naked cluſter; and the leaves are roundiſh, and heart-faſhioned.

Linnæus places this among the *polyandria polygynia*, and makes it a ſpecies of crowfoot. He calls it *crowfoot, with heart-faſhioned, angulated, and petiolated leaves*; but the cup conſiſting of three leaves, diſtinguiſhes it from the crowfoot, whoſe cup has five; not to mention the greater number of petals in the flower. It is a plant alſo of conſiderable virtues, which are recorded of it under the names of *pilewort* and *chelidonium minus*: wherefore there is uſe in preſerving the diſtinction.

What is called greater celandine, is a plant of an altogether different claſs, as will be ſeen hereafter.

Linnæus, who makes this a ſpecies of ranunculus, gives for the firſt character of that genus, a cup compoſed of five leaves: therefore, according to his original eſtabliſhment of the genus, this plant does not belong to it. He gives, by way of an exception at the end, this among others; and there eſtabliſhes the eſſential character of the genus to be the nectarium of the flower; the reſt of the parts being all inconſtant.

Let us examine this conduct in the eye of reaſon, and take this as an example of the foundation there is for that faſhionable ſyſtem.

Linnæus gives a deſcription of the ſeveral parts of the cup, flower, and fruit, of the ranunculus; which deſcription he calls the generical character: then among the ſpecies of ranunculus he places *pilewort*, which does not agree with that character. Indeed it contradicts the two moſt abſolute and obvious articles. He ſays the ranunculus has a cup compoſed of five leaves, and a flower compoſed of five petals; but *pilewort* has a cup of three leaves, and a flower of more numerous petals. It is thus diſtinguiſhed by nature, and it has always been diſtinguiſhed by name; and has diſtinct virtues. Why therefore ſhould it be thus confounded with crowfoot? Linnæus perceives afterwards, that *pilewort* does not agree with his characters of that genus: then he makes an obſervation, which is, that all the parts are inconſtant, except that there is a nectarium about the unguis of each petal. This, he ſays, is the eſſential mark. if ſo, his whole generical character is ſet aſide. He himſelf acknowledges it to be uſeleſs; why then is it continued? We have ſhewn it to be falſe: therefore it ought to be rejected.

Beſide theſe obvious things in which the *pilewort* differs from his eſtabliſhed character of ranunculus, there are others, as the pointed ends of its petals, and the like leſſer articles. Theſe I do not name, the former being ſo evident. I have been the more particular on this head, as it may ſtand in all reſpects for an inſtance of the wrong management brought into the ſcience by this new method.

There is but one known ſpecies of *pilewort*, and that is a native of Britain.

Common Pilewort.

Chelidonium minus.

The root is compoſed of a great many little tuberous pieces, of the bigneſs of a barley-corn, with fibres among them: they are browniſh, whitiſh, or rediſh on the outſide, and white within.

The leaves ſtand on long footſtalks; and are of a roundiſh form, ſome more ſome leſs cornered or angulated, but all indented in the manner of a heart, for the reception of the footſtalk: Thoſe which riſe firſt are rounder, the others more cornered. They are of a fine green, and frequently have a ſpot of whitiſh or blackiſh in the middle.

The ſtalks are ſhort, and lie upon the ground: they have numerous leaves on the lower part, and they ſend up long ſlender naked footſtalks for the flowers.

Theſe are yellow, large, and beautiful: one ſtands at the top of each ſtalk, and is compoſed of a great number of narrow ſharp pointed petals in a three-leaved cup, and has a tuft of threads in the centre.

The ſeeds ſtand naked in a ſmall cluſter.

It is common under hedges, and flowers in March.

C. Bauhine calls it *Chelidonia rotundifolia minor*; others in general, *Chelidonium minus*.

We call it *Figwort*, *pilewort*, and *Small celandine*. Sometimes it grows much larger in leaves and flowers, and ſometimes the flowers are naturally double. In theſe conditions it has been deſcribed

Great Sparrwort

Ivy leav'd water Crowfoot

fine leav'd water Crowfoot

Small flowerd water Crowfoot

little Sparrwort

narrow leav'd water Crowfoot

tender leav'd water Crowfoot

white flowerd tall Crowfoot

Purple Crowfoot

low Crowfoot with prickly Seeds

broad leav'd Crowfoot

broad leav'd nervous Crowfoot

blunt leav'd Crowfoot

Scarlet Crowfoot or Garden Ranunculus

Common Crowfoot

Common Water Crowfoot

narrow leav'd water Plantain

Broad leav'd water Plantain

H Roberts Sculp

ſcribed as different ſpecies by authors; but they are only accidental varieties.

The roots of *pilewort* are cooling and ſoftening. They are an excellent remedy in the pain of the piles; bruiſed, and applied to the part: hence they obtained the name. A decoction of them in red wine is alſo excellent in the ſame diſorder when they bleed too much.

A cataplaſm made of the roots and leaves bruiſed, and laid on ſcrophulous tumors, has been known to do great ſervice.

Inwardly a ſtrong decoction is good in the jaundice.

Having thus ſeen the form and virtues of this plant, the reader will be able to paſs a more perfect judgment on that method, which propoſes making it a ſpecies of crowfoot.

Here is an herb different in form, ſhape, and virtues, from crowfoot, and diſtinguiſhed by the moſt obvious and eſſential parts, on a nearer inſpection. Can it be reaſonable, therefore, when the flower and its cup ſhew a manifeſt difference, we ſhould look for a hole in the bottom of the petals, to unite this and the crowfoot? Or can it be proper to join together a plant with a cooling root, and a whole ſeries of others which are of a burning and cauſtick nature? This is confounding what Nature has widely ſeparated; and we ſee ſhe has given marks enough of that diſtinction.

GENUS XIV.

ARROWHEAD.

SAGITTARIA.

THE flower conſiſts of three petals, and has a three-leaved cup: the ſeeds ſtand in a round naked cluſter: the leaves have long footſtalks, and are ſhaped like the bearded head of an arrow.

There are two ſorts of flowers on this plant, male and female. The male ſtand uppermoſt on the ſtalks. Their general form is alike; but in the centre of the male flowers there are only threads topp'd with buttons: in the female, none of theſe but the rudiments of the future ſeeds, with their appendages, a kind of filaments for the reception of the duſt from the buttons.

Linnæus places this among the *Monœcia Polyandria*, ſeparating it far from the other naked ſeeded plants; and joining it with the oak, hazel, and walnut tree. The reaſon of this is, that there are the different male and female flowers. His explanation of the claſs of *Monœcia* is this: It conſiſts of plants, in which *the males and females live in the ſame houſe, but ſleep in different beds* *; that is, there are male and female flowers on the ſame plant.

This is an inſtance how unnatural the method of that author is. In our plain courſe, in this part marked out by Mr. Ray, the *arrowhead* is joined to thoſe plants to which its flowers and ſeeds ſhew it naturally belongs; and the mentioning the ſeparate flowers in the account is ſufficient.

DIVISION I. BRITISH SPECIES.

1. Common Arrowhead.

Sagittaria vulgaris.

The root is large, thick, white, and hung with long fibres.

The firſt leaves are long, narrow, and graſſy; and theſe, till better known, were miſtaken for a ſeparate plant; and called the great-rooted water graſs.

The following leaves are thoſe which characteriſe the plant. They are placed on very long footſtalks, reaching from the bottom to the ſurface often where there is a great depth: theſe are thick, ſoft, ſpungy, and of an obtuſely angulated form. The leaves are large, and formed like the bearded head of an arrow, tolerably ſharp at the point, and at the two beards. They are of a gloſſy ſurface, and fine green.

The ſtalks riſe two or three together from the centre of the cluſter of leaves: they are naked two, three, or four feet high, thick, and ſpungy, and of a ſmooth ſurface.

The flowers ſtand on long footſtalks, and are large and white: they grow three or four from the ſame place, ſurrounding the ſtalk.

The ſeeds follow the female, which are the lower flowers, and ſtand in large roundiſh naked cluſters.

It is common in waters, and flowers in July.

All authors call it *Sagitta*, and *Sagittaria aquatica*; but they idly divide it into a larger and ſmaller kind, from the difference of ſize in the leaves: there is alſo another variety, which they deſcribe as a diſtinct ſpecies, under the name of the *narrow-leaved ſmaller arrowhead.* All theſe grow promiſcuouſly together, and are no more than accidental changes; but there is one ſmall ſpecies, the form of whoſe leaves and flowers ſhews it to be diſtinct:

2. Little Arrowhead, with pointed leaves, and large flowers.

Sagittaria minor foliis acutioribus flore majore.

The root conſiſts of a great cluſter of whitiſh fibres.

The leaves that riſe firſt are narrow, ſhort, and deeply ribbed. They have no footſtalks, and are in ſome degree graſſy.

The leaves that follow theſe riſe in a little cluſter: their footſtalks are ſmall and firm; and they are very narrow, and very ſharp-pointed, of a pale green, and highly ribbed.

* Mares habitant cum fœminibus in eadem domo, ſed diverſo thalamo.

The ſtalk is naked and ſlender.

The flowers are large, white, and beautiful.

The ſeeds ſtand naked in a little round button.

It is common in ſhallow waters in the north of England, and has been found on the Thames ſhore by Lambeth. It flowers in Auguſt.

Plukenet calls it *Sagitta aquatica omnium minima.*

DIVISION II. FOREIGN SPECIES.

1. Blunt-leaved Arrowhead.

Sagittaria aquatica foliis obtuſis fructu parvo.

The root conſiſts of a large, irregular lump, with a great number of long fibres.

The leaves ſtand on long footſtalks, are of the arrowhead ſhape, but very broad at the baſe, and blunt at the end.

The flowers are large and white.

The ſeeds ſtand naked in a ſmall round cluſter.

It is a native of Aſia, and flowers in Auguſt.

Rheede calls it after the Aſiatick name, *Culitamara.* Plukenet, *Sagittariæ foliis planta fructu glomerato monopyrene.*

2. Trifoliate Arrowhead.

Sagittariâ foliis ternatis.

The root conſiſts of a great number of fibres about a fleſhy head.

The leaves ſtand on long, thick, and ſpungy footſtalks, three on each: they are very long, narrow, and of a pale green, but of the true arrowhead form.

The ſtalks are long, weak, ſpungy, obtuſely angulated, and naked.

They are furniſhed toward the tops with large and beautiful flowers.

The ſeeds follow in ſmall naked heads.

It is a native of China and the Eaſt Indies.

Petiver calls it *Sagittaria Chinenſis foliis ternis longiſſimis.*

The *common arrowhead* is cooling; but we have no particular account of its virtues.

GENUS XV.

WATER PLANTAIN.

PLANTAGO AQUATICA.

THE flower is compoſed of three petals, and has a three-leaved cup, which remains after it is fallen. The ſeeds ſtand together in a little naked head, and their outer covering is looſe.

Linnæus places this among the *Hexandria polygynia*, and calls it *aliſma.* In this genus he joins with it the plant called *ſtarry headed water plantain*; which, though commonly called by the ſame general name, is properly ſeparated, as having the ſeeds ſucceeding each flower contained in ſix abſolute capſules; and the *aliſma* of Dillenius, in which the ſeeds are contained in numerous ſmall and obtuſe capſules.

DIVISION I. BRITISH SPECIES.

1. Narrow-leaved Water Plantain.

Plantago aquatica anguſtifolia.

The root is a great thick tuft of fibres.

The leaves riſe in a large cluſter, and are very long and narrow: they ſtand on footſtalks of four or five inches long; they are pointed at the end, diſtinguiſhed by three large ribs running lengthwiſe, in the manner of the *plantain*; and are of a fine bright green.

The ſtalks riſe from the centre of theſe leaves; and are ſlender, weak, and a foot high, and have no leaves on them.

The flowers ſtand about the tops; and are ſmall and white, each compoſed of three petals, with a few threads in the centre.

The ſeeds follow in round, ſmall, rough heads.

It is common in ſtanding waters, and flowers in June.

C. Bauhine calls it *Plantago aquatica anguſtifolia.* J. Bauhine, *Plantago aquatica minor.*

2. Broad-leaved Water Plantain.

Plantago aquatica latifolia.

The root conſiſts of a great tuft of fibres, from which there riſe a cluſter of ſtalks to ſupport the leaves: the bottoms of theſe being broad and cloſe compacted, form a kind of round head; whence the fibres grow.

The leaves ſtand on theſe footſtalks, which are long, hollowed, weak, and ſpungy: they are large, broad, and oblong, blunt at the end, undivided at the edges, and of a ſmooth ſurface, and freſh green colour; with large ribs running lengthwiſe, in the manner of *common plantain.*

The ſtalk is naked, thick, ſmooth, and three feet high: there grow a multitude of branches from it in a regular order; ſo that it has from the middle upwards a kind of conic ſhape.

The flowers ſtand on the tops of the footſtalks that riſe from ſeveral parts of theſe: they are ſmall

ſmall and white; and they are extremely numerous.

The ſeeds ſtand three together, in a little head after every flower.

It is common in waters, and flowers in June.

C. Bauhine calls it *Plantago aquatica latifolia.* Others, *Plantago aquatica major.*

The leaves of this are cooling, and, as it is ſaid, repellent. They are good in the piles, and are uſed to lay on womens breaſts, to dry up the milk. Two varieties of this plant have been deſcribed as diſtinct ſpecies; the one with long and narrow, the other with very large and broad leaves.

DIVISION II. FOREIGN SPECIES.

1. Blunt-leaved water Plantain.

Plantago aquatica foliis obtuſis.

The root is compoſed of numerous fibres.

The leaves ſtand on conſiderably long foot-ſtalks; and are large, broad, and of a fine freſh green. They are divided at the ſtalk in a heart-like manner, and are blunt at the end.

The ſtalks are thick, weak, and branched.

The flowers are ſmall and white, and are each compoſed of three blunt ended petals.

The ſeeds ſtand naked in a ſmall head.

It is a native of Virginia, and flowers in autumn.

Vaillant calls it *Damaſonium ramoſum folio cordiformi.* Morriſon, *Sagittaria Virginiana obtuſiore latofolio floribus minoribus albis.*

It does indeed partly reſemble the ſagitaria, and partly the *water plantain*; but the ſmall knob of ſeeds refers it to this genus.

GENUS XVI.

MEADOWSWEET.

ULMARIA.

THE flower conſiſts of five petals, and ſtands in a cup compoſed of a ſingle leaf divided into five parts. The ſeeds are ſeven after each flower, and are twiſted.

Linnæus places this among the *icoſandria polygynia*; and in his earlier works makes it a ſpecies of filipendula or dropwort: in his later, he deſtroys this genus, and makes both the dropwort and *meadowſweet* ſpecies of ſpiræa.

They are diſtinct in nature from ſpiræa, and mutually from one another. This new method therefore, which was intended to render botany diſtinct, we ſee, increaſes the perplexity that attended it, and creates confuſion.

Spiræa does not belong even to the ſame natural claſs with theſe two genera; for its ſeeds are contained in capſules, whereas thoſe of dropwort and *meadowſweet* are naked. Therefore, although they are joined in a method, the claſſes of which are eſtabliſhed upon the number of filaments in the flower, they are far ſeparated by nature in the fructification.

Their difference one from another is not ſo ſtriking, but it is ſufficient: the diſtinctions of genera are ſubordinate to thoſe into claſſes, and ſhould be founded on leſſer particularities.

The *meadowſweet* has ſeven twiſted ſeeds after every flower, and has the leaves irregularly pinnated. The dropwort has twelve ſeeds after every flower, and they are not twiſted, and its leaves are regularly pinnated: theſe are ſufficient diſtinctions. Theſe Linnæus knew, for he has named them; therefore he ſhould have uſed them. Thus on many other occaſions this author may be convicted out of his own words, of knowing that his method was defective and erroneous.

There is only one ſpecies of *meadowſweet* a native of Britain.

DIVISION I. BRITISH SPECIES.

Meadowſweet.

Ulmaria vulgaris.

The root conſiſts of a vaſt quantity of hard, tough, long fibres, of a rediſh colour, riſing from a ſmall longiſh head.

The leaves ſtand on moderately long footſtalks, and they are very beautiful in ſhape and colour: they are pinnated: each compoſed of three or four pairs of pinnæ, with a large, irregular leaf at the end. They are notched at the edges: their colour is a bright green on the upper ſide, a greyiſh or whitiſh underneath; and they are hard to the touch.

The ſtalk is firm, rediſh, upright, and branched. It grows to four or more feet in height, and is ſtrongly ſtriated.

The leaves ſtand irregularly on it, and are like thoſe at the bottom, but have fewer pinnæ.

The flowers are ſmall and white, and ſtand in long, irregular tufts at the tops of the ſtalks.

The ſeeds are greeniſh, twiſted, and ſtriated. It is common by waters, and flowers in June.

J. Bauhine calls it *Ulmaria.* C. Bauhine, *Barba capræ floribus compactis.* Some, *Regina prati.*

It is celebrated extreamly as a wound herb; and by ſome is recommended internally as a ſudorifick. The flowers give a pleaſant flavour to liquor. Mixt with mead they give it the taſte of the Greek wines.

DIVISION II. FOREIGN SPECIES.

Trifoliata Meadowſweet.

Ulmaria trifoliata.

The root is a great tuft of fibres riſing from a ſmall head.

The firſt leaves ſtand on long, rediſh foot-ſtalks, and are large, of a pale green colour, and firm ſtructure. They in ſome degree reſemble thoſe leaves of the *common meadowſweet* that grow on the upper part of the ſtalk. They are compoſed of three parts or three ſeparate leaves, which may be called one pair of pinnæ, and an end leaf.

The ſtalk is firm, upright, and five foot high. Its leaves reſemble thoſe from the root, but they are ſmaller.

The flowers are large, and white.

The ſeeds are twiſted.

It is a native of North America.

Moriſon calls it *Ulmaria Virginiana trifoliata floribus candidis amplis longis et acutis.* Others, *Ulmaria major trifoliata Virginiana.*

GENUS XVII.

DROPWORT.

FILIPENDULA.

THE flower is compoſed of five petals, and ſtands in a cup divided into five parts. The ſeeds following each flower are twelve in number, and are erect. Linnæus, we have juſt ſhewn, joins this and meadowſeet with the ſpiræa among his *icoſandria polygynia.*

There is but one known ſpecies of *dropwort*, and that is a native of Britain.

Dropwort.

Filipendula vulgaris.

The root conſiſts of a vaſt tuft of fibres, to which there are connected in many places large fleſhy lumps: theſe are of a duſky colour on the outſide, and white within.

From the head of this cluſter riſe ten or a dozen leaves of a very beautiful and regular form. They have very ſhort footſtalks, and are regularly pinnated, each having ſix, ſeven, or more pairs of pinnæ, with an odd leaf at the end, all uniform, oblong, and regularly dented round the edges.

The ſtalk riſes in the midſt of theſe, and is upright, round, firm, and two or three foot high.

The leaves ſtand irregularly on it, and are like thoſe at the bottom.

The flowers are white, and have a large tuft of yellowiſh threads in the middle.

The ſeeds ſtand in a little, naked head.

It is not uncommon in dry paſtures, and flowers in autumn.

C. Bauhine calls it *Filipendula vulgaris.* J. Bauhine, *Filipendula.* We, *Dropwort.* All, names taken from the tuberous parts of the root, which reſemble ſo many great drops, and hang by threads.

The root of *dropwort* is attenuant in the viſcera; but has a ſlight aſtringency in the bowels. It works by urine, and brings away gravel. For this uſe it is beſt taken in decoction.

It is good in epilepſies and other nervous complaints. To this purpoſe a tincture made of it in wine is the beſt form of giving it; and it ſhould be made with three ounces of the dried root to a quart of the liquor.

It has alſo been found ſerviceable againſt the fluor albus; and for this is beſt given in powder. In this form fifteen grains is a proper doſe.

In repeated doſes in this laſt form it is ſaid to have cured dyſenteries. It is one of thoſe remedies of which our fore-fathers were very fond; and which we have very unreaſonably neglected.

C. Bauhine and others have deſcribed what they call a leſſer ſpecies of *dropwort*; but according to their own accounts, this differs in little but ſize, and is evidently a variety.

GENUS XVIII.

MALLOW.

MALVA.

THE flower is compoſed of five petals, which join together at the baſe; and ſtands in a double cup: the outer of theſe compoſed of three leaves; the inner one, of a ſingle leaf divided into five parts, and both remain with the ſeeds. Theſe are gathered into a round, flat head, and have the outer covering looſe.

Thus far the character of the genus comprehends with the ſeveral kinds of *mallow*, thoſe of *marſh mallow* and *vervain mallow*. To diſtinguiſh the *mallow* from theſe, we are to add, the leaves are entire, of a roundiſh figure, and green.

The reaſon of this addition to the character of the genus is, that the *althæa*, and *alcæa*, *marſh*, and *vervain mallow* have the ſame flowers and ſeeds; but the leaves in the *marſh mallow* kinds are oblong, and white: and in the *vervain mallow* they are deeply divided. They are very nearly allied, and are included among the *monadelphia polyandria* by Linnæus.

DIVISION I. BRITISH SPECIES.

1. Common Mallow.

Malva vulgaris.

The root is long, large, white, and furniſhed with many fibres.

The leaves riſing from it ſtand on long foot-ſtalks, and are of a roundiſh form, but deeply waved, or ſinuated and notched.

The ſtalk is round, firm, upright, and a yard high: the leaves on it reſemble thoſe from the root, but are ſmaller and more waved.

The flowers are large, and of a beautiful red. They ſtand in great numbers at the tops of the ſtalk and its branches.

The ſeeds are collected into a round, flat cluſter, and preſerved by the cup.

It is common in all waſte places, and flowers throughout the ſummer.

C. Bauhine calls it *Malva ſilveſtris folio ſinuato.* Others, *Malva vulgaris.*

2. Little white-flowered Mallow.

Malva pumila flore albo.

The root is long, and white, and has many fibres.

The leaves riſe in a tuft or cluſter, and have moderately long footſtalks. They are of a roundiſh figure, and pale green colour, and are leſs ſinuated than thoſe of the *common mallow.*

The ſtalks are numerous, and they lie upon the ground, though ſufficiently thick, and firm.

The leaves on them are like thoſe at the bottom, but ſmaller.

The flowers ſtand on ſhort footſtalks, and are large, and of a pale whitiſh colour, ſometimes with a few ſtreaks of purpliſh, and ſometimes a faint tinge of the ſame colour throughout.

The ſeeds ſtand in little round cluſters.

It is common by way ſides, and flowers all ſummer.

C. Bauhine calls it *Malva ſylveſtris folio rotundo.*

3. Small purple-flowered rough-ſeeded Mallow.

Malva flore minore purpureo ſeminibus rugoſis.

The root is long, white, and hung round with many fibres.

The leaves ſtand on long, ſlender footſtalks, and are little, of a roundiſh figure, but deeply ſinuated, and of a duſky green.

The ſtalk is thick, tolerably erect, and about a foot high.

Its leaves are altogether like thoſe from the root, but ſmaller, and on ſhorter footſtalks.

The flowers are numerous, very ſmall, and of a blueiſh purple.

The ſeeds follow in a ſmall, rounded, flat cluſter, and are rough to the touch.

It is not common with us, but grows in Kent and Suſſex, and ſome other places in barren ground. It flowers in June.

Boerhaave calls it *Malva ſilveſtris foliis ſinuatis minoribus floſculis minimis Anglica.* Ray, *Malva minor flore parvo cærulio.*

4. Tree Mallow.

Malva arborea.

The root is very large, woody, white, long, and full of fibres.

The leaves that riſe from it ſtand on long footſtalks, and are of a rounded figure, deeply ſinuated and notched; and of a pale green colour, and velvety ſoftneſs to the touch.

The ſtalk riſes in the midſt of the cluſter of them, and they preſently after fade and wither away.

This is ſix or ſeven foot high, and very thick, firm, and woody.

The leaves ſtand irregularly on it on long foot-ſtalks, and are ſo much ſinuated that they frequently appear in ſome degree curled.

The flowers are ſmall, and whitiſh, with a pale bluſh of purple.

The ſeeds ſtand in round, flat cluſters.

It is not unfrequent about our ſea-coaſts, and flowers in July.

Merret calls it *Malva arborea marina noſtras.*

DIVISION II. FOREIGN SPECIES.

1. Curled Mallow.

Malva foliis criſpis flore albido.

The root is long, white, and thick.

The leaves riſing from it ſtand on long foot-ſtalks, and are large, rounded, but a little oblong, and very beautifully curled about the edges. If this were the ſole diſtinction from the common kind, we ſhould ſay culture or accident gave it, and ſhould make it a variety; but there are others that ſhew it to be a diſtinct ſpecies.

The ſtalk is firm, upright, and ſix, ſeven, or eight foot high, thick enough to ſupport itſelf very erect; but not nearly ſo thick as in the *tree mallow.*

The leaves on it are ſomewhat more oblong than thoſe from the root.

The flowers ſtand in cluſters about the inſertions of the footſtalks of the leaves: they have very ſhort pedicles, and are of a pale whitiſh colour.

The ſeeds ſtand in a rounded, flat head.

It is a native of the ſouth of France, whence we have brought it into our gardens. It flowers in Auguſt.

C. Bauhine calls it *Malva foliis criſpis.* J. Bauhine, *Malva criſpa.*

2. The Hollyhock.

Malva roſea.

The root is long, white, thick, and hard, and has about it a vaſt quantity of fibres.

The firſt leaves are roundiſh, and curled about the edges. They are of a pale green, ſomewhat hairy, and ſtand on long footſtalks.

The ſtalk is ſeven or eight feet high: the leaves ſtand irregularly on it, and are large, and placed on long footſtalks. They are of a more oblong

figure than thoſe at the root, and of the ſame pale colour.

The flowers have ſhort footſtalks, and grow all up the ſtalks from the middle upwards: they are very large, and naturally of a pale red colour, conſiſting of five ſegments, joined at the baſe, as in the *common mallow*.

The ſeeds follow in large, round cluſters alſo as in the *mallow*.

It is a native of Spain, and has thence been brought into our gardens, where culture has changed the colour and form of the flowers, rendering them double, and otherwiſe very various.

C. Bauhine calls it *Malva roſea folio ſubrotundo*. J. Bauhine, *Malva roſea ſive hortenſis*.

3. Fig-leaved Hollyhock.

Malva roſea foliis digitatis.

The root is long, thick, white, and buſhy, with a multitude of fibres.

The leaves riſing from it ſtand on long, green, hairy, tender, footſtalks: they are very large, of a pale green, and deeply divided into five, ſeven, or more parts. Their whole figure is oblong, but approaching to round, and the ſegments are cut in very deep.

The ſtalk riſes in the midſt of theſe, and is round, firm, upright, thick, and branched. Its leaves reſemble thoſe from the root, but they are more deeply divided, commonly down to the middle rib, or very near it.

The flowers grow on ſhort footſtalks on the upper part of the ſtalks and branches. They are very large, and uſually of a pale yellow: but in the colour there is the ſame variations as in the other; the art of the gardener rendering it deeper and paler, and making the flower ſingle or double.

The ſeeds ſtand in round, flatted cluſters, and are large and compreſſed.

It is a native of Spain and other warm parts of Europe, and flowers in July.

C. Bauhine calls it *Malva roſea folio ficus*.

Various-leaved Mallow.

Malva folius rotundus et angulatis.

The root is ſmall, long, and white, and has a great many fine fibres.

The leaves riſe from it in a ſmall tuft, and are of a roundiſh figure, a little dented at the ſtalk, and come to a ſmall point at the end. They ſtand on long, tender, hairy footſtalks, and are of a pale green above, and white underneath, and ſerrated round the edges.

The ſtalk riſes in the midſt of this tuft, and is ſlender, weak, hairy, of a pale green, and a foot and half high, with numerous branches.

The leaves ſtanding on it are oblong, broad at the baſe, ſharp pointed, and often divided into three parts.

The flowers are large, and of a deep purple; and they ſtand on the tops of the branches. The ſeed comes after in round, flat heads.

It is a native of Spain, and flowers in July.

C. Bauhine calls it *Malva folio vario*. J. Bauhine, *Malva trimeſtris flore cum unguibus purpureis*.

The common *mallow* is cooling and diuretick: it partakes of the virtue of the *marſh mallow*, to be next deſcribed, but in an inferior degree; and the ſeveral other ſpecies here deſcribed poſſeſs the ſame qualities, but they are of leſs value.

It is ſoftening in cataplaſms, and is a good ingredient in clyſters. The freſh root uſed in a ſtrong decoction is excellent in ſtranguries, and heat of urine, and the gravel. The root of the little white flowered kind makes a pleaſanter drink for this purpoſe, and has much the ſame virtues.

GENUS XIX.

MARSHMALLOW.

ALTHÆA.

THE flower is compoſed of five ſegments, joined at the baſe, and ſtands in a double cup. The ſeeds follow in a round, flatted cluſter. The leaves are oblong, white, and ſoft to the touch. This is one of the *monadelphia polyandria* of Linnæus, as the former and ſucceeding genus.

DIVISION I. BRITISH SPECIES.

Marſhmallow.

Althæa vulgaris.

The roots are long, white, and furniſhed with very large fibres.

The firſt leaves are ſmall, and of an oval figure; a little notched about the edges: they ſtand on long footſtalks, and are of a pale green, and very ſoft.

The ſtalks riſe ſeveral together in the midſt of the cluſter, and are very ſtrong, upright, hard, and firm. The leaves that riſe from the root fade at their appearance, and are ſoon gone.

The leaves ſtand irregularly on the ſtalks, and are large, oblong, of a figure approaching to triangular; white, and ſoft to the touch.

The flowers are large and white, with the ſame faint bluſh of purpliſh.

The ſeeds ſtand in ſmall, round heads.

It is common about ſalt water rivers, and flowers in June.

The markets are ſupplied with it from the gardens about London, where it grows in great abundance, and perfectly well.

J. Bauhine calls it *Althæa ſive biſmalva*. Others ſimply, *Althæa*, or *Althæa vulgaris*.

The

The virtues of *marſhmallow* are the ſame with thoſe of the *common mallow*, but it has them in a greater degree. The root is pleaſant, and gives water a thick mucilaginous conſiſtence, with an agreeable ſoftneſs: wherefore the decoction or infuſion are the beſt forms of giving it.

It is emollient and diuretick. Taken in the way of tea it is excellent againſt the gravel: or in a ſtronger decoction, in the worſt complaints of that kind.

Outwardly uſed it is emollient and diſcutient. A ſyrup and an ointment are kept in the ſhops in which *marſhmallow* root is a great ingredient, and which have their name from it; but a common infuſion has more virtue by far than the ſyrup; and generally a pultice of the freſh root, white bread and milk, will do better outwardly than the ointment.

Beſide theſe, which are its virtues moſt regarded, it is excellent in aſthmas and againſt tickling coughs; and alſo in eroſions of the bowels and dyſenteries. In both theſe caſes it acts upon the ſame principle, ſoftening and blunting the acrimony of the humours by its ſoft mucilaginous juice.

A decoction of *marſhmallow* root alone, is excellent againſt the heat of urine attending gonorrhæas.

We have obſerved that the firſt leaves of the *marſhmallow* are rounder than thoſe on the ſtalks: ſometimes the whole have that appearance, and this principally from too wet a ſituation. In this condition the plant has been conſidered by Plukenet as a diſtinct ſpecies. He calls it *Althæa vulgari ſimilis folio retuſo brevi*: but this is nothing more than a variety.

DIVISION II. FOREIGN SPECIES.

Great-flowered Marſhmallow.

Althæa flore magno.

The root is compoſed of a large head, and a vaſt quantity of white, thick fibres.

The firſt leaves are large, broad, obtuſe, and approaching to round, but ſinuated at the edges, and terminating in a kind of broad, blunt point. They ſtand on ſhort footſtalks, and are of a whitiſh green.

The ſtalks are numerous, thick, firm, and five foot high: they riſe from the centre of the tuft of leaves, and are of a whitiſh green, and divided into many branches.

The leaves on theſe are broad and oblong, ſerrated at the edges, and ſharp at the points. They ſtand on long footſtalks, and have a velvety ſoftneſs.

The flowers ſtand at the extremities of the branches, and are very large and beautiful. They very much reſemble hollyhock flowers, and are naturally of a pale fleſh colour, but vary by culture, and become of a deeper red.

The ſeeds ſtand in a round, flat, naked head.

It is a native of Africa, and flowers in July.

Cornutus calls it *Althæa roſea peregrina*, and moſt others follow him.

GENUS XX.

VERVAIN MALLOW.

ALCÆA.

THE flower conſiſts of five large ſegments joined at the baſe. The ſeeds ſtand in a rounded, flat cluſter. The leaves are deeply divided.

The *alcæa* is one of the *monadelphia polyandria* of Linnæus. Its difference from the *marſh* and *common mallow* is principally in the leaves; but it is a diſtinction ſo long preſerved and ſo familiarly known that it may be retained.

DIVISION I. BRITISH SPECIES.

Vervain Mallow.

Alcæa vulgaris.

The root is long, large, woody, perennial, and white.

The leaves that riſe from it are of a rounded form, deeply ſinuated at the edges, but not divided into ſmall ſegments as the others. Theſe riſe in a cluſter: they are ſupported on moderately long footſtalks, and are of a beautiful green.

The ſtalks riſe among theſe: they are numerous, round, firm, upright, and of a pale green: they are well furniſhed with leaves, and thoſe extreamly beautiful. They keep the rounded general form of thoſe from the root, but they are divided deeply into ſmall and elegant ſegments. Theſe are of a paler colour than thoſe from the root.

The flowers are very large, and of a beautiful pale red.

The ſeeds ſtand in rounded and flat heads.

It is common in paſtures, and flowers in May.

C. Bauhine calls it *Alcæa vulgaris major*. J. Bauhine, *Alcæa vulgaris*.

The leaves of this plant are frequently curled at the edges. This happens eſpecially when it grows in very dry places; and it has been deſcribed in this condition as if a diſtinct ſpecies, under the name of *Alcæa tenuifolia criſpa*.

DIVI-

DIVISION II. FOREIGN SPECIES

1. Finger'd-leaved Vervain-Mallow.

Alcæa foliis digitatis.

The root is large, thick, white, and ſpreading.

The leaves that riſe from it are large, of a roundiſh form, but deeply cut in five places: they ſtand on long footſtalks, and are of a pale green.

The ſtalks are numerous, firm, and woody: they riſe to ſix feet in height, and are of a yellowiſh green, and rough to the touch.

The leaves on theſe are numerous, and very beautifully divided into five parts, in a fingered manner: they ſtand on rough footſtalks, and are of a pale green.

The flowers are numerous and large, and are of a very beautiful bright red: the ſeeds ſtand in rounded fat cluſters.

It is a native of Italy, and flowers in Auguſt.

C. Bauhine calls it *Alcæa cannabina.* J. Bauhine, *Alcæa pentaphylli folio ſive cannabina.*

2. Hairy Vervain Mallow.

Alcæa hirſuta.

The root is long, white, and thick, and has many fibres.

The leaves that riſe from it are rounded, but have three viſible indentings: they ſtand on long footſtalks, and are of a pale green, and hairy.

The ſtalks are numerous: they riſe from the centre of this cluſter of leaves; and are round, yellowiſh, weak, and ten inches high.

The leaves ſtand irregularly on them, and are divided each into three parts, and of a pale green, and hairy.

The flowers are moderately large, and of a bright red; and they ſtand in a rough hairy cup.

The ſeeds follow in a flat rounded head.

It is a native of France and Italy, and flowers in July.

C. Bauhine calls it *Alcæa hirſuta.* J. Bauhine, *Alcæa villoſa.*

The virtues of the *vervain mallow* are the ſame with thoſe of the *common mallow*, but in an inferior degree.

There are ſeveral other plants allied to the *mallow* kind in their general appearance, but producing their ſeeds in capſules: theſe are diſtinguiſhed by modern writers under the names of *ſida*, *&c.* and will be treated of in the next claſs.

SERIES II.

Thoſe of which there are no ſpecies natives of BRITAIN.

GENUS I.

NOBLE LIVERWORT.

HEPATICA.

THE flower is compoſed of three petals, or of ſeveral ranges of petals, three in each; and has a three-leaved cup. The ſeeds ſtand in a naked cluſter; and are numerous, oblong, pointed at each end, and lightly hairy. When the flower is ſingle, there ſtands a tuft of numerous filaments in the centre: in the double flowers theſe are leſs diſtinctly ſeen.

Linnæus places this among the *polyandria polygynia*. In his firſt works he makes it a ſeparate genus; in his latter he confounds it with the anemone; but their difference is very obvious and certain, the anemone having no cup to the flower. There is properly only one ſpecies of this plant; but culture has raiſed a multitude of varieties of it; ſome of which, that appear the moſt diſtinct from the reſt, have been deſcribed by authors as if diſtinct ſpecies.

1. Single Blue Hepatica.

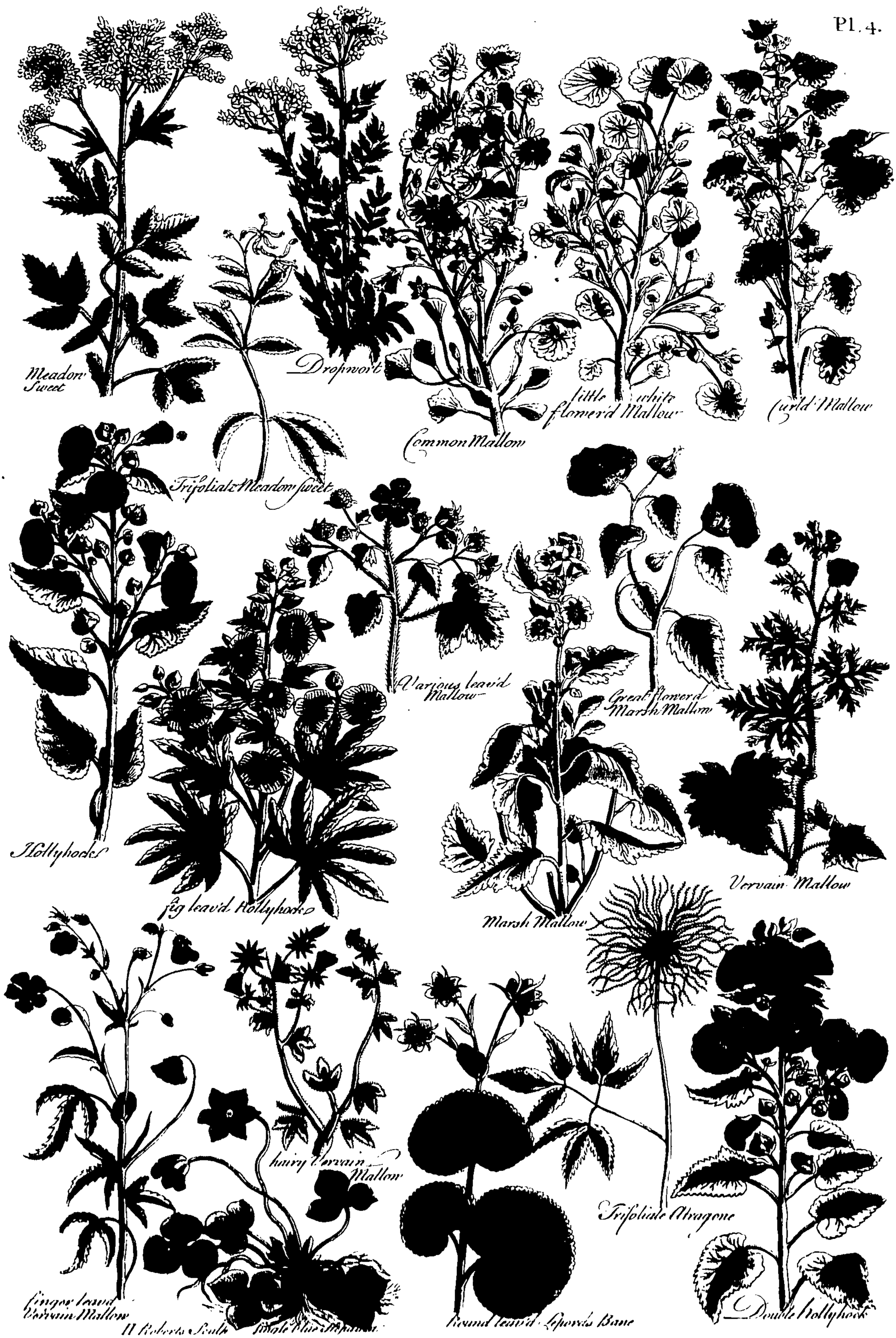
Hepatica flore ſimplici cæruleo.

The root is compoſed of a large fleſhy head, and a vaſt quantity of fibres: theſe laſt ſo cover the tuberous part on all ſides, that it appears, on taking out of the ground, to be only a tuft of fibres.

From ſeveral parts of this root riſe firſt naked ſtalks ſupporting the flowers, and afterwards the leaves. As nature has inverted the general order in the growth of this plant, it is proper, in the deſcription, we follow her courſe.

The footſtalks which ſupport the flowers are ſhort, and very ſlender: one flower ſtands on each, and this is compoſed naturally of three, ſix, or nine petals; for in the wild plant there is found all that variety. When the petals are only three, they ſtand in a regular order; when ſix, there is a ſecond range of three over the firſt; and when nine, a third range over that. In the centre there is a great tuft of fibres; and under the flower there is a three-leaved cup, which remains when that is fallen. The common colour of the flower is blue in its natural ſtate, ſometimes red, and ſometimes white.

The


Meadow Sweet
Dropwort
Common Mallow
little white flower'd Mallow
Curld Mallow
Trifoliate Meadow sweet
Various leav'd Mallow
Great flower'd Marsh Mallow
Hollyhocks
fig leav'd Hollyhocks
Marsh Mallow
Vervain Mallow
hairy Vervain Mallow
Trifoliate Dragone
Double Hollyhock

The ſeeds follow in a ſmall roundiſh head.

The footſtalks of the leaves are longer than thoſe of the flowers, and are ſlender and weak: each ſupports a ſingle leaf: this is divided into three parts; but the diviſion does not run down to the ſtalk: the colour on the upper-ſide is a duſky green, and on the under-ſide it is paler.

It is a native of Germany, and many other parts of Europe, and flowers early in ſpring.

C. Bauhine calls it *Trifolium hepaticum flore ſimplici*; others, *Hepatica nobilis*, or *Noble liverwort*.

It is recommended as an agglutinant, balſamick, and vulnerary. It has been eſteemed alſo greatly in diſorders of the liver; but it is not ſo much regarded here, as abroad.

GENUS II.

LEOPARD'S BANE.

THORA.

THE flower conſiſts of five petals, with a tuft of threads in the centre: the ſeeds ſtand in a ſmall naked cluſter: the root is tuberous; and the leaves are roundiſh, and entire.

Linnæus places this among the *polyandria polygynia*, making it a ſpecies of ranunculus, not a diſtinct genus, with its peculiar and proper name. The flowers and ſeeds agree with thoſe of the ranunculus: but the whole aſpect of the plant is different from any kind of crowfoot; and the generical character, taking in the leaves and root, is quite diſtinct.

There may appear the leſs inconvenience in joining this plant with the ranunclus; becauſe not only the form of the flower and ſeeds is the ſame, but the plant agrees in its qualities in ſome degree with the crowfoots. But as there is an antient diſtinct name for it, and there are grounds in nature for ſupporting the diſtinction, I have preſerved it.

There is properly but one ſpecies of *thora* known.

Round-leaved Leopard's Bane.

Thora valdenſis.

The root is compoſed of a number of oblong thick pieces, hanging from one head.

The leaves that riſe from it ſtand on long footſtalks, and are nearly round. The ſtalk is inſerted at the middle, where there is a little dent; and they are finely ſerrated about the edges.

Among theſe riſes a ſingle ſtalk of eight inches in height, ſlender, round, and upright; not branched, but dividing ſometimes into two, ſometimes into three twigs at the top.

Near the bottom of this ſtand two or three leaves, reſembling thoſe from the root, or ſometimes a little dented at the end oppoſite the ſtalk; in ſome plants alſo they are doubly dented, ſo as to give the idea of a diviſion into three parts.

Toward the top of the ſtalk ſtand ſeveral leaves of a very different figure; they are narrow, longiſh, and have no footſtalks, and are ſmall, and not divided at the edge.

On the top of the ſtalk ſtands a ſingle flower, when it is not divided; when it is, one on each diviſion.

Theſe are moderately large, and of a very beautiful yellow, compoſed of five broad petals, and placed in a cup of five narrow leaves.

The ſeeds ſtand in a naked cluſter.

It is a native of the mountains in Switzerland, and other parts of Europe; and flowers in May.

J. Bauhine calls it *Thora folio cyclaminis*; others, *Thora*, and *Thora valdenſis*. Moſt authors deſcribe a ſmaller ſpecies; but it is no more than a variety of this. What we have given, is the plant in its utmoſt perfection: where it is ſtarved, the leaves are leſs and more dented; and there are only two or three of the narrow ones, and a ſingle flower on the ſtalk: but this which is called the *leſſer thora*, being brought into a garden, becomes the ſame with the *greater*.

It is accounted poiſonous.

GENUS III.

CLIMBER.

ATRAGENE.

THE flower is compoſed of twelve petals, and has a cup compoſed of four leaves: the ſeeds ſtand in a naked cluſter, and have long downy filaments.

Linnæus places this among the *polyandria polygynia*. It reſembles the clematitis in the ſeeds, but differs greatly in the flower.

Trifoliate Atragene.

Atragene foliis pinnatis, trifoliatis.

The root is long, woody, and creeping.

The firſt leaves are broad, and ſtand on long footſtalks, only three on each, and thoſe not deeply ſerrated.

The ſtalks are numerous, woody, weak, and ſlender: they are four or five feet long, and divided into numerous branches.

The leaves ſtand on long footſtalks, and are of a particular form: they have a pinnated aſpect, and conſiſt each of nine leaves, diſpoſed in three parcels; one parcel at the end of the footſtalk; the other two at the ſides, in the manner of wings. Theſe are of an oblong form, and beautifully divided; and are ſerrated round the edges.

The flowers ſtand on long footſtalks, and are of a beautiful purple colour, ſometimes deeper, ſometimes paler.

The ſeeds ſtand in a round head, with long and beautiful downy threads.

It is frequent in ſome parts of Germany, and flowers in June.

C. Bauhine calls it *Clematis alpina geranifolia.*

Haller, in the new method, makes this ſhrub a ſpecies of anemone. He calls it *Anemone tubis caudatis pinnis latiſſimis.* He adds the word *tetrapetala*, conſidering the cup as the flower.

It is of a hot and pungent taſte. The bark of the root has been uſed in outward applications againſt pains, and is ſaid to have taken great effect againſt the ſciatica. Some have uſed it alſo in the gout, under the violence of a fit in their feet, but without ſucceſs.

The END of the FIRST CLASS.

THE

THE

BRITISH HERBAL.

CLASS II.

Plants whoſe flower is compoſed of SEVERAL PETALS, *with* NUMEROUS THREADS *in the centre, and whoſe ſeeds are contained in* SEVERAL PODS.

THIS, like the former, is a claſs perfectly diſtinguiſhed by nature; although the plants of which it conſiſts have been ſeparated from one another, and joined with ſuch as are unlike them, by the faſhionable form of this ſcience. Mr. Ray, who followed nature carefully, has kept theſe together, as the preceding. He calls them *herbæ multiſiliquæ, ſive corniculatæ.*

The plants of this claſs are fewer than in many others; and we ſee how regularly, naturally, and obviouſly they are connected together; yet Linnæus has diſperſed them over all his works. We join them, becauſe ſeveral ſeparate ſeed-veſſels follow every flower. This character they all have, and this no other have; it is therefore a very plain and perfect mark for their diſtinction: that author ſeparates them, becauſe though all have ſeveral threads in the centre; yet ſome have a greater, ſome a ſmaller number. Becauſe hellebore has twenty or more of theſe threads, he places that, and, for the ſame reaſon, columbine and larkſpur, among his *polyandria polygynia*, joining them with the plants of our laſt claſs. Becauſe in the greater houſeleek theſe threads are twelve, and in the leſſer ſpecies ten, thoſe plants are ſeparated from the preceding, and from one another, and placed in two diſtinct claſſes; the former among his *dodecandria*, and the other among his *decandria*. The flowering ruſh, for bearing but nine threads in every flower, is ſent into a claſs different from all the others, among his *enneandria:* and the periwinkle, having but five threads in each flower, is joined with ivy, currants, and the vine, whoſe fruits are berries, under the claſs of *pentandria.*

Thus we ſee the plants of which this claſs is compoſed, and which are ſo perfectly allied to one another, diſtributed by this author throughout every part of his ſyſtem; ſcarce any two of them are to be found together.

The queſtion here is, whether a number of plants are to be treated of together, becauſe they all have their ſeeds placed in ſeveral capſules after every flower, a character no others enjoy in common with them; or whether they are to be ſeparated into different claſſes, becauſe one has ten, and another has but nine threads in the centre? Such is the ſyſtem of Linnæus. Novelty made it pleaſe, and its obſcurity rendered it admired; but it cannot be laſting.

Tournefort judged better in this caſe: erroneous as he has been with reſpect to the plants of the preceding claſs, he determined rightly of theſe. The ſingular character of ſeveral ſeparate capſules after every flower, could not eſcape him; though Linnæus, who knew, would not obſerve it. Tournefort keeps them together, as Mr. Ray has done, under that character. The inſtances we have given of Linnæus's unnaturally ſeparating theſe plants from one another, and unnaturally joining them with others, are from the Engliſh wild kinds. We ſhall ſhew greater force put upon nature, when we come to foreign genera; if there can be greater than joining the periwinkle and the vine, one having for its fruit a berry, the other ſeveral ſeparate dry pods; becauſe in each the flower has five threads in the centre.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this country.

GENUS I.

BLACK HELLEBORE.

HELLEBORUS NIGER.

BLack *hellebore* has fingered leaves; and large flowers, compoſed of five roundiſh petals: and theſe have no cup. In the centre ſtand numerous threads, with upright flatted buttons, and the rudiments of ſeveral capſules, which when ripe are large, and compreſſed, and contain roundiſh ſeeds.

It is one of the *polyandria polygynia* of Linnæus.

DIVISION I. BRITISH SPECIES.

1. Small wild Hellebore.

Helleboraſter niger flore viridi.

The root is a tuft of thick, numerous, black fibres.

The firſt leaves ſtand on long footſtalks; and are large, of a deep green, and divided into ſeveral parts, in the manner of fingers: theſe are each of them long, narrow, ſharp-pointed, and deeply ſerrated at the edges.

The ſtalks are numerous, and about a foot high: they are round, green, firm, and upright.

The leaves on theſe are few: they reſemble thoſe from the root; but are ſmaller, and have ſhort footſtalks; often none.

The flowers ſtand at the tops of the branches, and very large and ſingular: they have no cup: they are green, but paler than the leaves; and they have a great number of threads, with white buttons in their centre.

The ſeed-veſſels appear among theſe, and afterwards ripen; the flower not falling, but remaining with them.

Some have hence ſaid that it is properly a cup, and that this plant has no flower. It is true, that the flower of this plant does not agree with their definitions of a flower, which ſay that it muſt be compoſed of leaves differently coloured from thoſe of the plant, and that they muſt fall off before the ſeed ripens; but nature is more certain than their characters. The flower of the *wild hellebore* is truly ſuch; and all we learn by their nice diſtinctions is, that their definition is imperfect: that ſhould be altered; not this ſtruck out of the liſt of flowers.

The pods, when ripened, are large, flatted, and tough; and each contains ſeveral ſeeds.

It is a ſcarce plant. It has been found in woods in Kent and Suſſex, and in Buckinghamſhire. It flowers early in ſpring.

It has the virtues of *black hellebore*, but in an inferior degree.

Our country-people give a little of the powdered root to their children againſt worms; but it is too rough a medicine. The leaves dried and powdered are taken for the ſame purpoſe; and an infuſion of the flowers is ſaid to be a preſervative againſt contagious diſeaſes. It is a very harſh medicine, and ſhould be given with caution.

C. Bauhine calls this *Helleboraſter niger hortenſis flore viridi*; others, *Helleboraſtrum*.

2. Great wild Hellebore.

Helleboraſter maximus.

The root is long, large, and furniſhed with many fibres.

The leaves are numerous, large, and beautiful: they ſtand on long footſtalks, and are divided deep, in the manner of fingers: there are nine or more of theſe on each ſtalk, or compoſing each compleat leaf. They are of a bluiſh green colour, and gloſſy; and are very narrow, ſharp-pointed, notched at the edges, and often turn inward at the ends.

The ſtalk is a yard high: it is green, round, very thick, and full of leaves.

Theſe have their long footſtalks like thoſe from the root. Thoſe on the lower part reſemble thoſe of the root in form; but thoſe near the top are ſimple, not fingered; they are only divided into two or three irregular parts at the end. The flowers are very numerous, but not ſo large as in the preceding: they are green, with a bluſh of purple, principally on the outſide; and they have numerous threads, with white buttons in the centre.

The ſeed veſſels are many, and the ſeed is roundiſh.

It is wild in ſome parts of Kent and Suſſex, but is not common. It flowers very early in ſpring.

The roots are a violent purge, and too harſh for inward uſe.

The country-people put pieces of them into holes cut in the ears, or other parts of their cattle, in many diſorders; and they produce a diſcharge, which often is ſerviceable: they call theſe *ſetters*, and the plant has thence been named among them *ſetterwort*.

C. Bauhine calls it *Helleborus niger fœtidus enneaphyllon Plinii*; others, *Helleboraſter maximus*.

Both this and the former, as they are ſcarce in their wild ſtate, are kept by our country-people in gardens, where they call them both *bear's-foot*.

DIVISION II. FOREIGN SPECIES.

True black Hellebore.

Helleborus niger flore roſeo.

The root conſiſts of a vaſt quantity of thick, tough, long, and black fibres; ſometimes faſtened to a ſmall head, ſometimes without any.

The leaves riſe in a cluſter, and are large and beautiful: they are of the fingered kind, and of a pale green colour, and fleſhy texture. They ſtand on footſtalks three or four inches long, thick, fleſhy, rediſh, but ſeldom quite erect; and each leaf is compoſed of about ſeven parts, ſometimes leſs: theſe are broad, ſhort, ſerrated at the edges, and pointed at the ends.

Among theſe riſe the ſtalks which ſupport the flowers.

Theſe are ſhorter than the footſtalks of the leaves, and, like them, thick, fleſhy, and often rediſh: each ſuſtains a ſingle flower, and each has a kind of little leaf on it placed about its middle, and altogether unlike the others.

The flower is very large, and very beautiful; it is white, with a bluſh of rediſh, and is as big as a ſmall ſingle roſe: there are numerous threads in the centre, with white buttons.

The ſeed-veſſels are numerous, flatted, and full of a roundiſh ſeed.

It is a native of Germany, and is frequent on the Apenine mountains. It flowers in the dead of winter; whence it has obtained among our gardeners the name of *Chriſtmas flower*.

C. Bauhine calls it *Helleborus niger flore roſeo*; others, *Helleborus niger verus*.

This is the *black hellebore* ſo celebrated among the antients for its virtues. It was eſteemed a ſovereign cure for madneſs.

It is an excellent deobſtruent, and is good in nervous and hyſterick caſes. The principal virtue is in the outer bark of the root, the reſt being inſipid.

It may be given in powder, or in tincture; but the beſt method is the latter. It is a coarſe, rough medicine; and there ſhould always be given with it cloves, cardamoms, or ſome other ſpice.

It operates as a cathartick, but very uncertainly. Its beſt uſe is in obſtinate obſtructions. I have known inveterate complaints in the head cured by a continued uſe of a tincture of *hellebore* and cloves, thirty drops for a doſe.

The tincture for this purpoſe ſhould be made with an ounce of *hellebore-root*, a dram and a half of cloves, and a quart of proof ſpirit, without heat. Great care muſt be taken that the root be freſh, for it is often damaged by keeping.

GENUS II.

GLOBE-FLOWER.

TROLLIUS.

THE leaves are fingered: the flower conſiſts of numerous petals; the outer ones are ſhorter; and the inner, which are larger, bend toward one another; ſo that the flower is globular: the capſules of ſeeds are numerous.

Linnæus, in his *Genera Plantarum*, makes this a ſpecies of hellebore; from which it differs in that eſſential and obvious character, the number, form, and diſpoſition of the petals which compoſe the flower. He was not ignorant of this plain diſtinction: but the fondneſs for his ſyſtem would not then let him ſeparate a plant he ſaw ſo perfectly diſtinct. He acknowledges that the number and figure of the ſeveral parts of the flower vary; but he ſays the eſſential character of the genus conſiſts in the nectarium. This is the ſhift to which we have ſeen this great author before reduced in the crowfoot kind. Nature diſclaims that ſyſtem, which will force, under one imaginary genus plants the form, number, and ſituation of the ſeveral parts of whoſe flowers are unlike; becauſe in each there is a little glandule in the lower part of the petal, that is, ſomewhat alike in one and in the other.

In his *Species Plantarum* this author has given them as ſeparate genera.

DIVISION I. BRITISH SPECIES.

Common Globe flower.

Trollius vulgaris.

The root is a tuft of long thick fibres, connected to a very ſmall head.

The leaves riſe in a cluſter, and each is ſupported on a long and moderately thick footſtalk: they are in the whole of a roundiſh circumference, but are divided down to the ſtalk into five, ſeven, or more parts; and each of theſe is alſo toward its extremity divided more ſlightly into ſeveral others, and all the way notched at the edges.

The ſtalk is round, thick, upright, two feet high; of a pale green, and ſcarce at all divided into branches.

Its leaves are few, and placed irregularly: there are one or two towards the bottom, and one only near the top; the lower ones have ſhort footſtalks, the upper none: they reſemble thoſe which riſe from the root in their diviſion and colour, which is a duſky and unpleaſant green.

The flower is large, yellow, ſingular, and beautiful: it never perfectly opens. The outer petals or leaves are ſhort, the inner much larger; and they nearly cloſe at their points, leaving only a very ſmall opening into the body of the flower: the ſhape of which is therefore globular. There

ſtand within it a vaſt number of very ſhort filaments, and among them the rudiments of numerous capſules. Toward the bottom of each petal there is a gland which opens in a labiated manner, the lip being undivided.

The ſeeds are contained in numerous capſules.

It is a native of Wales, and of ſome of the northern counties of England. It flowers in June.

We keep it in gardens for the ſingularity of the flower.

The virtues have not been tried.

Moſt authors have called this plant a *Ranunculus*, not obſerving the ſeed-veſſel.

C. Bauhine calls it *Ranunculus montanus aconiti folio flore globoſo*; others, *Ramunculus globoſus*.

DIVISION II. FOREIGN SPECIES.

Small Globe-flower.

Trollius humilis flore croceo.

The root is a tuft of long, thick fibres.

The leaves riſing from the root are deeply divided in the manner of thoſe of the other; but they ſtand on ſhorter footſtalks, and are of a pale green.

The ſtalk is round, tolerably upright, and about ten inches high.

Its leaves are few; and they are deeply divided, and have the diviſions ſerrated at the edge as the others: they are of a paler green, and ſtand very irregularly.

The flowers are very large, and very beautiful: their colour is a deep yellow, with a tinge of orange; and they at firſt have the figure of thoſe of the *common globe-flower*; but when they have ſtood ſome time, they open: they have a great number of threads within, and are ſucceeded by many ſhort and flat pods.

What is very ſingular in the ſtructure of the flower in this ſpecies is, that the glandules we have deſcribed at the bottoms of the petals in the *common globe-flower*, are in this very long, and give a very particular aſpect to the whole.

This ſpecies is a native of many parts of the world, but not of England. Tournefort found it in the Greek iſlands, and Amman in Siberia: they both deſcribe it as a ſpecies of hellebore.

Tournefort calls it *Helleborus niger orientalis ranunculi folio flore nequaquam globoſo.* Amman, *Helleborus aconiti folio flore globoſo croceo.*

Linnæus deſcribes the firſt as a ſpecies of *hellebore*, in his *Flore laponica.*

GENUS III.

MARSH MARYGOLD.

CALTHA.

THE leaves are undivided: the flower is compoſed of five large petals, and has no cup. In the centre there are numerous filaments, with erect, obtuſe, compreſſed buttons. The capſules are numerous, ſhort, and pointed; and the ſeeds roundiſh.

Linnæus places this among the *polyandria polygynia*, next to the crowfoot; ſuppoſing, in his uſual manner, that they are of the ſame claſs, becauſe both have numerous filaments in the centre of the flower; though the ſeeds of the crowfoot ſtand naked, and the ſeeds of the *marſh marygold* are enclоſed in capſules.

Of this genus there is but one known ſpecies, and that is a native of Britain, and very common.

Common Marſh Marygold.

Caltha paluſtris.

The root is compoſed of a vaſt number of long, thick, whitiſh fibres, which run under the ſurface to a great diſtance.

The leaves riſing from it ſtand on long, green, thick, and fleſhy footſtalks: they are of a roundiſh figure, but indented where they receive the ſtalk, and very lightly notched about the edges.

The ſtalks are thick, round, fleſhy, upright, of a pale green, and a foot and a half high: they have few branches, and their leaves ſtand irregularly; thoſe toward the lower part have footſtalks, thoſe higher up have not; and they are all of the ſame ſhape, though ſomewhat ſinuated and pointed, and of the ſame fine green colour.

The flowers are very large, and of a beautiful yellow: they have a great tuft of ſhort threads in the centre.

The ſeeds are contained in a cluſter of ſhort pods.

It is frequent in our meadows, and flowers in April.

C. Bauhine calls it *Caltha paluſtris flore ſimplici*; others, *Caltha paluſtris.*

Authors have deſcribed, and even figured, what they call the *ſmall marſh marygold*, as if a diſtinct ſpecies; but it is only an accidental variety.

The flowers of this plant are ſometimes found naturally double: this alſo has by ſome been figured as a diſtinct ſpecies; but theſe are the moſt common and trivial of all varieties.

Its virtues have not been tried.

GENUS IV.

FLOWERING RUSH.

BUTOMUS.

THE leaves are long and narrow. The flowers are diſpoſed in a kind of umbel which has a three leaved cup. Each conſiſts of ſix petals, three larger within, and three ſmaller without, and ſix capſules for the ſeeds follow the flower.

Linnæus places this among his *Enneandria*, becauſe its flower has nine filaments in the centre; ſeparating it by ſeveral claſſes from the globe-flower and marſh marygold, to which its flowers and ſeed-veſſels ſhew it manifeſtly belongs.

There is but one known ſpecies of this genus, and that is a native of Britain.

We ſee this claſs not only comprehends fewer genera than many others, but that ſeveral of thoſe have but a ſingle ſpecies.

The Flowering Ruſh.

Butomus.

The root conſiſts of a multitude of long, ſlender and tough fibres joined to a ſmall head: many of theſe heads grow together, ſo that one cluſter of the roots will be extreamly large.

From theſe riſe together the leaves and ſtalks; theſe form a kind of bulbous bottom, and the leaves ſurround one another, as well as the ſtalk, to ſome height; after this they ſeparate; and they are long and narrow: they are not flat, but of a three cornered ſhape, and are thick, and full of a light, looſe pith. Their colour is a bluiſh green, and they are ſharp at the points.

The ſtalk is tall and naked. It riſes from the centre of a cluſter of leaves, and is three or four foot high. It is round, ſmooth, thick, and full of pith.

The flowers ſtand in a large tuft at the top, and theſe are moderately large, and very beautiful. They conſiſt each of ſix ſhort, obtuſe, and roundiſh petals, and are of a delicate pale red colour. They have two ſets of threads in the centre, ſix which ſtand outward, and three within them; and on theſe are buttons, formed each of two lamellæ or plates. In the centre of theſe are ſix rudiments, which, after the flower is fallen become the fruit.

Theſe capſules are oblong, erect, and open inwards. They are each compoſed of a ſingle piece, whereas thoſe of the others uſually are of two. The ſeeds are oblong and obtuſe.

It is not uncommon with us in waters; flowering in June.

J. Bauhine calls it *Juncus floridus*. C. Bauhine, *Juncus floridus major*.

We have no account of its virtues.

GENUS V.

STARRY WATER PLANTAIN.

DAMASONIUM.

THE flowers conſiſt of three petals. The ſeeds are contained in capſules, ſeveral of which ſucceed every flower.

Linnæus places this among the *hexandria polygynia*, making it a ſpecies of *water plantain*, under the name *aliſma*. This was an early error, and we are to call the name *water plantain* a very improper one, though the addition of *ſtarry* makes a plain diſtinction.

We have been uſed to wonder that the common Engliſh writers named this as a ſpecies of that genus; but our ſurpriſe muſt be greater when we ſee this writer fall into the ſame confuſion. Its ſeed-veſſels plainly diſtinguiſh it from the *water plantains* properly ſo called, and refer it to this claſs, to which they do not belong.

There is but one known ſpecies of this genus, and that is a native of Britain.

Starry Water Plantain.

Damaſonium.

The root conſiſts of numerous long and ſlender fibres.

The leaves are numerous. They ſtand on footſtalks of three or four inches in length, and are oblong, broad, and often ſplit at the ends.

The ſtalks riſe in the centre of the tuft, and are eight or ten inches in length, irregular in their growth, much branched, and not very upright. They are round, thick, and fleſhy.

The flowers ſtand in cluſters at their tops, and in other parts: they have each a long ſlender pedicle, and are ſmall and white.

The ſeeds follow encloſed in capſules ſix after every flower. Theſe are diſpoſed in a radiated manner, ſo as to reſemble the figure of a ſtar; and thence the plant had its name *ſtarry*; as it had that of *water plantain* from ſome reſemblance of the leaves to thoſe of that plant.

It is common in ſhallow muddy waters and about ditch ſides. The leaves ſometimes float upon the water, at other times they ſtand dry.

It flowers in July, and the ſeed-veſſels ſoon follow.

J. Bauhine calls it *Damaſonium ſtellatum daleſcampii*. C. Bauhine and moſt others, *Plantago aquatica ſtellata*.

We have no account of its virtues.

GENUS VI.

ORPINE.

TELEPHIUM.

THE flowers conſiſt each of five petals, and ſtand in a kind of umbel. The leaves are fleſhy and flat.

Linnæus places this among his *decandria pentagynia*, making it a ſpecies of ſedum or houſeleek. The flowers and ſeed-veſſels indeed are very like; but *orpine* in its general form and figure, is ſufficiently diſtinct; and having been called by a ſeparate name, and endowed with particular virtues, we preſerve the diſtinction.

There is the more uſe in this becauſe the ſpecies of houſeleek are in themſelves very numerous; ſo that the leſſening the number is rendering the knowledge of them leſs perplexed and more familiar.

DIVISION I. BRITISH SPECIES.

1. Common Orpine.

Telephium vulgare.

The root is compoſed of a great number of tuberous pieces irregularly joined together, and having many fibres between them.

The firſt leaves are ſmall and inconſiderable; they are oblong, blunt at the ends, and have no footſtalks. They preſently grow yellow and decay.

The ſtalks are numerous, round, thick, fleſhy, upright, and two foot high.

The leaves ſtand thick upon the ſtalks, two, or three ſometimes riſing from the ſame ſpot: they are broad, oblong, flat, blunt at the ends, and ſlightly ſerrated at the edges. Their colour is a freſh and beautiful green.

The flowers ſtand in cluſters at the tops of the ſtalks: they are ſmall, but of a delicate red. Each is compoſed of five ſmall, radiated, pointed leaves, with ten threads, and the rudiments of the ſeed veſſels in the centre.

The flower being fallen theſe rudiments ripen into capſules five after every flower, in which are contained very ſmall and numerous ſeeds.

It is common in our paſtures, and flowers in July.

The whole plant is ſucculent and fleſhy, and will preſerve its form and colour a long time when cut from the root, eſpecially if refreſhed with water.

C. Bauhine calls it *Telephium vulgare*. J. Bauhine, *Anacampſeros vulgo faba craſſa*.

We ſometimes ſee it with a white flower. In this condition it has been deſcribed by ſome as a diſtinct ſpecies. There are alſo ſome other varieties in the breadth and diſpoſition of the leaves, from which there have been made many imaginary ſpecies, ſuch as the *broad-leaved orpine*, and the like; but theſe, when more nicely examined, will be found not to differ in any thing eſſential from this common kind.

Orpine is famous as a vulnerary. It is ſtyptick and ſubaſtringent. The root contains the principal virtue, and it is excellent in dyſenteries, and in diarrhæas that erode the inteſtines. It is alſo uſed externally in burns. The beſt way of giving the root is carefully dried and reduced to powder; five and twenty grains for a doſe.

2. Rooſe-root.

Telephium roſeum.

The root is large, thick, and of an irregular form, oblong, and tuberous, and full of fibres: it is brown on the outſide and white within, and is brittle, and of a very pleaſant ſmell. There is plainly the ſcent of the damaſk roſe in it, but it is very ſlight; and the ſame flavour is perceived in taſting it.

The firſt leaves are oblong, narrow, and without footſtalks: they quickly fade.

The ſtalks are numerous, and riſe in little cluſters from different parts of the roots. They are ſlender, round, and about a foot high.

The leaves are very numerous, and they ſtand irregularly on the ſtalks: they have no footſtalks. They are oblong, narrow, ſharp-pointed, and ſharply ſerrated at the edges. They are of a yellowiſh green, and uſually have a purpliſh tinge at the point.

The flowers ſtand in cluſters at the tops of the ſtalks. They are ſmall, and of a pale red.

The ſeeds follow in ſeparate capſules, which are longiſh and bent like horns.

It is frequent on the mountains in Wales and in Yorkſhire. It flowers in July.

C. Bauhine calls it *Rhodia radix*; and Moriſon *telephium roſeum*.

The root is recommended by ſome againſt the gravel. It is aperient by urine, but in ſome degree aſtringent in the bowels; and poſſeſſes in common with *orpine*, the virtue of blunting the acrimony of ſharp humours that erode the inteſtines. Againſt diarrhæas and dyſenteries it ſhould be given in powder; and as a diuretick, in decoction.

DIVISION II. FOREIGN SPECIES.

1. Oval leaved Orpine.

Telephium foliis ovatis.

The root is white, long, irregular in ſhape, and creeps under the ſurface, with numerous fibres.

The firſt leaves have ſhort pedicles, and are oblong, narrow, obtuſe and ſerrated, and of a pale green. Theſe fade quickly, ſo that there is no remain of them about the ſtalk.

Small wild Hellebore

Great wild Hellebore

True black Hellebore

Common Globe flower

Marsh Marygold

Flowering Rush

Starry water Plantain

Common Orpine

Rose root

Oval leavid Orpine

Short leavid Orpine

Yellow Stone Crop

Scorpion Stone Crop

white blunt leavid Stone Crop

Sharp Yellow Stone Crop

little white Stone Crop

Purple flowerd Stone Crop

M Roberts Sculp

The ſtalk is round, thick, fleſhy, of a pale green, two foot high, but not very erect. The weight of the top is too much for it towards the bottom, and it uſually bends or drops.

The leaves are numerous, of an oval figure, and with only the rudiments of a footſtalk: they are ſmalleſt at the bottom, broadeſt at the top, and ſerrated at the edges; the extremity terminating alſo in a ſmall point.

The ſtalk frequently ſends out branches toward the top, and on the ſummit of theſe ſtand the flowers.

They are ſmall but numerous, placed in a cluſter in the manner of *common orpine*, but of a deeper purple.

The ſeeds are contained in ſeveral ſmall pods.

It is a native of Italy, and flowers in July.

C. Bauhine calls it *Telephium purpureum majus*. J. Bauhine, *Anacampſeros purpurea*.

Its virtues are the ſame with thoſe of *common orpine*.

Some who have ſeen the error of multiplying the varieties of the common kind into ſpecies, have ſuppoſed this, which is a diſtinct ſpecies, to be only a variety: this is an error on the other ſide; it is plainly diſtinguiſhed as a ſpecies by the oval form of the leaves and the ſmallneſs of the flowers.

2. Short-leaved Orpine.

Telephium repens foliis brevibus.

The root is not tuberous or large, as in the *common orpine*, but compoſed only of fibres. The leaves that riſe from it are few and fade quickly, but there are always ſeen a great number of young ſhoots, which are full of little leaves.

Theſe riſe by degrees into ſtalks: they are round, fleſhy, weak, and a foot or more long, but they are only a part of that length in height; for they lie on the ground toward the bottom, and frequently take root there, creeping and ſpreading; ſo that the tufts of this plant are commonly large.

The leaves are very numerous on theſe ſtalks while young, but when they grow to a height, and approach toward flowering, they fall off; ſo that while the young ſhoots are very thick ſet with them, the flowering ſtalks are almoſt naked.

Theſe leaves are ſhort, broad, of a bluiſh green colour and a gloſſy appearance, and are not all indented at the edges.

The flowers ſtand on the tops of the ſtalks in a ſingle, large tuft; for the main ſtalk ſeldom divides, or ſends out any branches. Theſe are larger than the flowers of the *common orpine*, and of a bright pale red, ſometimes white. There ſtand in the centre of each flower ten threads with yellow buttons, which make a pretty variety in the colour; and among them are five rudiments of capſules.

The flowers being fallen theſe grow larger, and contain a very ſmall, pale brown ſeed in great plenty.

It is a native of the Apennines, and flowers in June.

The leaves remain on the young ſtalks all the winter.

C. Bauhine calls it *Telephium repens folio deciduo*. Others, *Telephium ſemper virens*.

Theſe two names ſeem contradictory, but Bauhine alludes to the droping of the leaves from the flowering ſtalks; the other to thoſe on the young ſhoots, being green all the winter.

The leaves are cooling, and are uſed in ointments, where the plant is common.

GENUS VII.

STONECROP.

SEDUM.

THE flower conſiſts of five petals, and ſtands in a cup compoſed of a ſingle leaf divided into five ſegments: in the centre of each flower are ſeveral threads ſurrounding five rudiments, which afterwards become ſo many capſules, containing ſmall numerous ſeeds. While theſe rudiments are in the flower each has a nectarium or little gland near its baſe.

Linnæus places this genus among the *decandria pentagynia*. It is nearly allied to the *orpine*, but its ſpecies are ſufficiently numerous without including thoſe of that genus, ſo long known by that name, and ſo diſtinct in figure and in their manner of growing.

DIVISION I. BRITISH SPECIES.

1. Yellow Stonecrop.

Sedum minus hæmatodes.

The root is ſmall, fibrous, and creeping.

The firſt branches that riſe from this, for there are no ſingle leaves riſing from it, are ſlender, weak, and lie upon the ſurface. They are three inches long, and ſet very thick with leaves, which are commonly of a blood red colour. This gave origin to the Latin name of the plant, which exactly tranſlated ſignifies *bloody*.

The ſtalks which bear the flowers are ſix or eight inches high: they are, like the others, round, thick, fleſhy, with a firm core, and are uſually of a rediſh colour.

The leaves ſtand as thick on theſe as on the others, and are of the ſame kind. They are oblong, thick, fleſhy, rounded in circumference, but a little flat on one ſide; and are of a pale green at firſt, but become red afterwards; and they terminate in a kind of weak prickle.

The flowers ſtand in a tuft in the manner of

thoſe of *orpine*, and are of a beautiful yellow colour. Each is compoſed of ſix leaves, and in the centre there are many ſhort threads ſurrounding ſeveral rudiments of capſules.

Theſe ripen when the flowers are fallen, and are full of ſmall ſeeds.

It is common on old walls and the tops of houſes, and flowers in July.

C. Bauhine calls it *Sedum minus luteum folio acuto*. J. Bauhine, *Sedum minus flore luteo*.

2. Scorpion Stonecrop.

Sedum minus ſcorpioides.

The roots are ſlender, and edged with a few fibres.

From theſe riſe numerous ſtalks, furniſhed with abundance of leaves, which lie in a cluſter about the root, but never riſe up to flowers. Theſe are two or three inches long, full of leaves in every part, but particularly about the tops.

Among theſe riſe the ſtalks which ſupport the flowers. They are thick, and compoſed of a fleſhy outſide, with a ſticky core. They are ten inches high, of a pale colour, and full of leaves at firſt, but theſe turn red, and ſoon after drop off about the roots.

They are oblong, thick, fleſhy, and pointed: they have no footſtalks; and till they looſe their firſt colour are of a beautiful green.

The flowers grow in cluſters on the top of the ſtalk, and are large, and yellow; they ſtand on little branches, which, before they open, turn round inward like a ſcorpion's tail.

The ſeeds are contained in capſules, ſeveral of which follow every flower.

It is common on old walls, and flowers in the middle of ſummer.

C. Bauhine calls it *Sedum minus luteum ramulis reflexis*. Others, *Sedum ſcorpioides*.

It has been accounted by many but a variety of the common yellow kind, but it is a diſtinct ſpecies, the flowers are larger; and the leaves longer.

3. White blunt leaved Stonecrop.

Sedum album folus obtuſis.

The root is ſmall, ſlender, and furniſhed with numerous fibres.

The ſtalks that firſt riſe from it are ſhort, thick, and branched: theſe lie upon the ground, and have a great number of oblong, fleſhy, pale green leaves on them.

The ſtalks which bear the flowers riſe among theſe: they are ſlender, upright, and a foot high.

The leaves ſtand irregularly on theſe, and in a conſiderable number: they are larger than thoſe on the firſt ſhoots that lie upon the ground, otherwiſe like them. They are of a pale green, rounded, oblong, and blunt at the ends.

The flowers ſtand at the tops of the ſtalks in bunches, but not ſo numerous or thick ſet together as in the yellow kind: they conſiſt of five leaves each, and are moderately large, and white.

The ſeeds are contained in ſmall capſules, ſeveral of which ſucceed every flower.

It is not uncommon on the tops of old houſes, and flowers in autumn.

C. Bauhine calls it *Sedum minus teretifolium album*. Others, *Sedum minus album*.

This is cooling and aſtringent. Its juice with plantain water makes a good gargle for a ſore mouth; ſpitting it out when uſed. The two preceding ſpecies have the ſame virtues, but in a leſs degree.

4. Cluſter-leaved Stonecrop.

Sedum foliis ſtipatis.

The roots are fibrous and ſmall.

There riſe from theſe numerous ſhort branched ſtalks, that lie upon the ground, and are very thick covered with fleſhy, oblong leaves.

Among theſe riſe ſlender ſtalks, which are upright, rediſh, four inches high, and not branched: theſe ſuſtain the flowers. The leaves are oblong, fleſhy, and end in a point. They ſtand in a very confuſed and thick cluſtered manner upon theſe, and often become red.

The flowers grow at the tops in ſmall tufts, and are little, and of a bright yellow.

The ſeed-veſſels are narrow capſules, ſeveral come after every flower, and they are full of ſmall ſeeds.

It is common on the mountains in Wales, and has been found on Saint Vincent's rock near Briſtol. It flowers in July.

Pitiver calls it *Sedum minus Vincentii*; and Merret, *Sedum minus e rupe divi Vincentii.*

5. Rounded-leaved Stonecrop.

Sedum minus circinnato folio.

The roots are ſmall and fibrous.

The leaves ſtand very cloſe upon the firſt ſhoots, which lie upon the ground, and are thick, ſhort, fleſhy, and of a pale green.

Among theſe riſe the ſtalks that bear the flowers: they are weak, ſlender, and four or five inches long.

The leaves on theſe are numerous, ſhort, blunt, and of an oval form; ſometimes divided at the end.

The flowers do not ſtand in tufts as in the preceding, but ſeparately on different parts of the ſtalk; and they are large and white.

Theſe are followed by ſeveral capſules full of very ſmall ſeeds.

Its leaves grow very irregularly on the ſtalks, ſometimes two, ſometimes four from the ſame ſpot; and thoſe on the ſhort ſhoots that riſe from the root and ſpread upon the ground are often diſpoſed in a rounded manner at their ends.

It is found in Yorkſhire and ſome other of the northern parts of England.

C. Bauhine calls it *Sedum minus circinnato folio.* Others, *aizoon daſyphyllon.*

6. Sharp yellow Stonecrop.

Sedum minus acre flore luteo.

The root is long, ſlender, and furniſhed with many fibres.

The firſt ſhoots are ſhort, branched, and cluſtered with leaves. They lie upon the ſurface, and are of a freſh and beautiful green.

The larger ſtalks which bear the flowers riſe among theſe, and are perfectly like them. They are ſlender, and their weight, from the number and thickneſs of the leaves, is ſuch that they cannot ſtand upright, but lie on the ground like the others. They are five or ſix inches long, and commonly are divided into branches. They are naked,

naked, and whitiſh toward the bottom; but on the upper part are altogether covered by thick cluſtered leaves; ſo that they have a kind of ſcaly appearance.

Theſe leaves are ſhort, thick, fleſhy, broad at the bottom, ſharp at the point, and of a bright green.

At the tops of the branches ſtand numerous large and beautiful yellow flowers, each compoſed of five pointed petals.

The ſeeds are contained in ſmall capſules, ſeveral of which follow every flower.

It is very common on walls; and in barren chalky ſoils will ſometimes grow upon the ground.

I have obſerved on the chalk hills near Grave ſend in great abundance. It flowers in June.

C. Bauhine calls it *Sempervivum minus vermiculatum acre*. J. Bauhine, *Sedum parvum acre flore luteo*.

It is an excellent antiſcorbutick, and is beſt given in form of an infuſion.

A decoction of it is good in ſore mouths ariſing from ſcorbutick habits. The freſh leaves bruiſed and applied to the ſkin raiſe bliſters, and are excellent in paralytick contractions or weakneſs of the limbs.

7. Little white Stonecrop.

Sedum parvum mite flore albido.

The root is long, ſlender, and fibrous.

The ſtalks that firſt riſe have cluſters of little leaves on them, and they are half upright half drooping.

Among theſe riſe others more robuſt, erect, and intended to bear the flowers.

Theſe are two or three inches high, round, thick, upright, and of a pale green, ſometimes of a rediſh colour.

The leaves are very ſmall: they ſtand irregularly, but at diſtances, not cluſtered, but having ſpaces between them. They are ſhort, broadiſh at the bottom, and pointed at the ends.

Toward the top the ſtalk commonly divides into two or three branches, and on the ſummit of theſe ſtand the flowers.

They are large, white, with a mixture of rediſh, and very beautiful. Each conſiſts of five narrow, ſharp pointed petals; and has ſome threads and rudiments of capſules in the centre.

The flower being fallen theſe capſules ripen, and each contains many ſmall ſeeds.

It is frequent in the north of England on old walls and houſes, and on the ground in barren places. It flowers in April.

Pitiver calls it *Illecebra alba mitis*. Merret, *Sedum minimum flore mixto ex albo & rubro*.

8. Purple Marſh Stonecrop.

Sedum purpureum pratenſe.

This is a ſingular and extreamly pretty plant.

The root is compoſed of numerous fibres, ſhort and very ſlender, riſing from a ſmall head.

The firſt ſhoots from this are ſhort, ſlender, and thick ſet with narrow leaves, which ſtand in a kind of cluſters or buttons at their tops.

Among theſe riſes uſually a ſingle ſtalk to ſuſtain the flowers. This is ſeven or eight inches high, tender, juicy, round, and uſually rediſh.

The leaves are numerous, ſmall, thick, and fleſhy: they are a little hairy, and have much the reſemblance of thoſe of the *common ſtonecrop*, but that they are flatter.

Toward the top the ſtalk divides irregularly into four or five branches, on the ſummits of which, and of their ſubdiviſions, ſtand the flowers.

Theſe are very beautiful, of a pale purple colour, moderately large, and compoſed of five ſharp pointed petals, with a few threads and the rudiments of ſome capſules in the centre.

When the flower is fallen theſe ripen. They are five in number, and they become pale. The ſeed is very ſmall.

It is frequent in the northern parts of England, where it grows on the wet parts of hills. It flowers in April and May.

C. Bauhine calls it *Sedum pratenſe ſubhirſutum purpureum*. J. Bauhine, *Sedum purpureum pratenſe*.

DIVISION II. FOREIGN SPECIES.

1. Branched Stonecrop.

Sedum ramoſum.

The root is long, ſlender, and has many fibres.

The firſt leaves are numerous, ſhort, fleſhy, and not unlike thoſe of purſlane: they are of a pale green, and as they fade grow yellowiſh.

The ſtalks are numerous, round, weak, and eight or ten inches long. They lie in part upon the ground, and in part ſtand up. They are thick ſet with leaves, and divided into numerous branches.

The leaves ſtand irregularly, and are oblong, fleſhy, of a pale green, blunt at the points, and without footſtalks.

The flowers are very numerous, ſmall, and white. They ſtand at the tops of the ſtalks, and of the numerous branches. Each conſiſts of five, little, pointed petals, and has in its centre ten threads ſurrounding the rudiments of five capſules.

When the flowers are fallen theſe ripen, and contain ſmall ſeeds.

It is frequent in the ſouth of France, and flowers in May.

Moriſon calls it *Sedum annuum album oblongo portulacæ minoris folio*. C. Bauhine, and others, after Mithiolus, *Cepæa*.

2. Large-flowered Stonecrop.

Sedum pumilum floribus majoribus flavis.

This is a ſmall but very pretty plant.

The root is ſlender, white, and has ſeveral fibres.

The firſt ſhoots from this ſpread about the ſurface, and often take freſh root as they lie; ſo that the plant is generally ſeen in very large tufts: theſe are thick ſet with leaves, eſpecially toward their extremities; and theſe are ſmall, fleſhy, oblong, and ſharp pointed.

The ſtalks that bear the flowers riſe among theſe. They are round, ſmall, fleſhy, and uſually rediſh:

rediſh: they are three or four inches high, and have leaves on them, but thoſe not cluſtered as in the preceding ſhoots.

Theſe leaves are ſhort, fleſhy, and ſharp pointed.

At the top of the ſtalk ſtand the flowers in a little cluſter, five or ſix together. They are large in proportion to the plant, and yellow. They conſiſt of ſix petals each, as the common Engliſh *ſtonecrop*, and have ten threads, and the rudiments of ſix capſules in their centre.

When the flowers are fallen theſe ripen, and are full of very ſmall ſeeds.

It is frequent about the Apenines and in other mountainous places, and flowers in June.

C. Bauhine calls it *Sedum minus luteum folio acuto*. Others, *Sedum rupeſtre*.

GENUS VIII.

HOUSELEEK.

SEMPERVIVUM.

THE leaves naturally diſpoſe themſelves in round cluſters. The flower is compoſed of twelve petals: it ſtands in a cup divided into twelve ſegments, and is followed by a cluſter of twelve capſules.

Linnæus places this among his *dodecandria polygynia*; the threads in the flower, and the rudiments of the fruit in general, anſwering to the number of diviſions in the cup and of the petals in the flower; but this is uncertain. It is upon this exact number of twelve ſtamina that Linnæus has placed it in his *dodecandria* claſs; but nature ſhews, and himſelf in ſome degree acknowledges, that this number of the threads, or ſtamina, is not certain: ſometimes we ſee them fewer, ſometimes more.

It is not proper, therefore, to remove a plant from among thoſe to which it plainly belongs, for the ſake of the particular number of threads in the flower, eſpecially when that number is not conſtant or certain; and this is the misfortune of that faſhionable method, not in this alone, but in numerous other inſtances.

The *ſempervivum* and the *ſedum*, *houſeleek* and *ſtonecrop* are plainly allied to one another; inſomuch that many have diſtinguiſhed them only by the names of greater and leſſer: we have, in our natural method, placed them next after one another; and this, becauſe the flower in each conſiſts of ſeveral petals, and the ſeeds are contained in ſeveral capſules: but Linnæus, becauſe theſe houſeleeks have twelve threads in each flower, and the ſtonecrops have but ten, has ſeparated them into diſtinct claſſes.

They evidently belong to the ſame: their diſtinction in the number of petals, and of capſules is a proper mark for a ſeparate genus, but nothing more: it has no right to place them in different claſſes; much leſs has the number of thoſe leſſer parts, which we ſee accompany in their variations thoſe more obvious and conſiderable.

It is according to theſe laſt nature has claſſed plants together, and we ſhould follow her ſteps; the obſervation in this caſe that the filaments agree in number with the petals in one genus, and in the other of the ſame claſs, was pretty; and an attention to their number and ſituation in other plants, is not always frivolous; but it was a weak imagination that prompted Linnæus to believe theſe were the proper characteriſticks of what we call claſſes, and what nature has made families of plants.

They are always diſtinguiſhed by greater characters.

DIVISION I. BRITISH SPECIES.

Great Houſeleek.

Sempervivum majus.

The root is compoſed of a great number of long, thick fibres.

The leaves riſe in a regular manner, forming a round cluſter, and there are continually offsets produced from theſe firſt cluſters, the leaves of which are diſpoſed in the ſame manner; ſo that we commonly ſee a great number of theſe ſhoots together, which make a very beautiful appearance.

The leaves are broad at the bottom, ſharp at the point, and even at the edges. They are of a pleaſant green, very thick, and fleſhy; and the larger being placed outward, and the leſſer all the way inward, in ſeveral ſeries, they give the idea of an eye.

From the centre of theſe cluſters riſes the ſtalk, which, when in flower, is of equal beauty with the leaves. It is a foot or more in height, and at the bottom as thick as a man's thumb; it gradually grows ſmaller all the way up, and is from top to bottom covered with leaves, which lie like ſcales, or like tiles of a houſe, one over another.

Theſe reſemble the bottom leaves in their fleſhy ſtructure, and in ſome degree in their form; but they are longer in proportion to their breadth: they are ſharp pointed, and of a pale colour, uſually with a tinge of red.

The flowers ſtand in great numbers on the branches, into which the main ſtalk divides at the top, and they are large, and of a fine red.

The capſules are ſmall, and contain very minute ſeeds.

It is common on walls and on the tops of old houſes, and flowers in July.

C. Bauhine calls it *Sedum majus vulgare*. Others, *Sempervivum majus*.

Its virtues are the ſame with thoſe of orpine, but it poſſeſſes them in a ſuperior degree. It is cooling and aſtringent. Outwardly it is excellent for ſore eyes, the juice being preſſed out and mixed with cream.

It is alſo a famous remedy for corns, weting them well with the juice, and then covering them with a piece of the ſkin of the leaf.

Internally it is cooling in fevers, and is particularly good in thoſe attended with ſharp diarrhœas.

A cooling ointment may be made of the bruiſed leaves boiled in lard, which will anſwer all the purpoſes of the unguentum populneum.

DIVI-

DIVISION II. FOREIGN SPECIES.

Tree Houſeleek.

Sempervivum arboreſcens.

This is not improperly diſtinguiſhed by the name of *tree houſeleek*: it has more the aſpect of a ſhrub, though a very ſingular one, than an herb.

The root is large, thick, ſpreading, and full of fibres.

The trunk, for it is more properly ſo called than the ſtalk, is five or ſix feet high, of the thickneſs of a man's arm, and of a pale green colour on the ſurface: from this ſhoot branches of the thickneſs of one's thumb; and theſe ſometimes are ſhort and ſimple, ſometimes longer, and divided into leſſer ramifications.

At the extremity of each ſtands a cluſter of leaves, formed into a circle, in the manner of thoſe of the *common houſeleek*, but very different in ſhape: they are oblong, and broad, ſmalleſt at the baſe, largeſt at the extremity, and there often dented in the heart-faſhioned manner: they are very tender and ſucculent; and, when nicely examined, are found to have ſome indentings at the edges.

The flowers ſtand upon peculiar ſtalks riſing from the upper part of the plant: theſe are tender, and covered with leaves diſpoſed in the manner of the *common houſeleek* leaves on its ſtalk, but of the ſame form with thoſe which ſtand in cluſters.

The flowers are extremely numerous, ſmall, and of a pale, but pretty yellow: they conſiſt each of twelve pointed petals, and have twelve threads, and the rudiments of twelve capſules in the centre.

When the flowers are fallen, theſe ripen, and contain a quantity of very ſmall ſeed.

It is a native of the Greek iſlands, and, as ſome ſay, of the warmer parts of Europe. It rarely flowers with us; and, when it does, it is at the end of ſummer.

J. Bauhine calls it *Sedum majus arboreſcens*. Cluſius, and others, *Sedum majus legitimum*, and *Sedum arboreum*.

Its virtues are the ſame with thoſe of the *common houſeleek*.

GENUS IX.

COLUMBINE.

AQUILEGIA.

THE leaves are divided into numerous parts: the flower conſiſts of five petals, and five glands or nectaria ſtanding alternately between them; theſe are of a long corniculated form: the ſeeds are contained in ſeparate capſules, five of which follow every flower.

Linnæus places this among his *polyandria polygynia*, ſeparating it from the plants to which it is moſt allied.

While we blame that author for his conduct in this reſpect, we are to acknowledge that we owe to him the right underſtanding of the ſtructure of this flower. The nectaria in moſt flowers are ſmall, and it is very rarely they are conſpicuous: they are glandules placed deep in the centre of them, in moſt caſes, and deſtined for the reception of a honey-juice. In this ſingular plant they are large, beautiful, conſpicuous, and form the moſt conſiderable part of the flower. What theſe horns of the *columbine* were, was not diſcovered till Linnæus ſhewed it: but they are truly what he calls them. It is thus in many inſtances, which we ſhall have occaſion to name: it were hard to ſay, whether moſt praiſe be due to him for his diſcerning genius, or his unwearied application. 'Tis with pleaſure I pay this juſt tribute of applauſe to an author whoſe ſyſtem I am obliged ſo frequently to cenſure. This is but one of a thouſand inſtances that they will be long obliged to Linnæus for his obſervations who ſhall decline his method.

Of this genus there is but one ſpecies a native of Britain.

DIVISION I. BRITISH SPECIES.

Wild Columbine.

Aquilegia ſylveſtris.

The root is long, large, and often divided into two or three parts; furniſhed with fibres, and of a browniſh colour.

The leaves are numerous, and of a bluiſh green: they ſtand on long foot-ſtalks, which are of a rediſh colour, and a little hairy. Each leaf is compoſed of three parts, and each of theſe parts of three diviſions: each diviſion may be looked upon as a ſeparate leaf; and the whole will then be compoſed of nine ſuch: theſe are divided at the edges, ſomewhat in the manner of an oak leaf.

In the centre of the tuft riſes the ſtalk, which is ſlender, upright, jointed, rediſh or bluiſh, and a little hairy; and, toward the top, divides into many branches.

The leaves ſtand irregularly on it: they are few, and like thoſe from the root, but ſmaller, and with fewer diviſions.

The flowers ſtand at the tops of theſe, and are large, and of a beautiful blue.

The ſeed-veſſels follow, five to each flower, and contain large black ſeeds.

It is wild in the woods of Yorkſhire, and other northern counties, and flowers in May.

C. Bauhine calls it *Aquilegia ſylveſtris*. J. Bauhine, *Aquilegia flore ſimplici*.

The ſeeds of *columbine* are famous againſt the jaundice. Matthiolus preſcribes them with ſaffron; and there is no better way of giving them: they open obſtructions of the viſcera, and operate by ſweat and urine.

It is alſo excellent alone in fevers, and in the ſmall-pox and meaſles, to throw out the puſtules.

A decoction of the roots and ſeeds makes a very good gargariſm againſt ſore throats.

For all theſe purpoſes the *wild columbine* is preferable to any of the garden kinds: and this is the caſe throughout all nature, the cultivated ſpecies having the moſt beauty, but the plain natural plant the moſt virtue.

This plant has been taken out of the woods into our gardens, and culture has given it a great variety of forms and appearances, which ſome have conſidered as diſtinct ſpecies. The *common garden columbine*, with large ſingle flowers, the *double inverted columbine*, and the *roſe columbine*, as alſo the *degenerate great columbine*, have been called ſo many diſtinct plants; but they are nothing more than varieties raiſed from this ſtock by various culture.

There are other ſpecies, though leſs common; and theſe deſerve to be diſtinguiſhed.

DIVISION II. FOREIGN SPECIES.

1. Great-flowered Columbine.

Aquilegia magno flore foliis majus diviſis.

The root is long, thick, and furniſhed with many fibres.

The leaves ſtand on long footſtalks, and are divided into many ſegments: but theſe are not broad, as in the common kind; but narrow, of a pale green, and ſharp-pointed.

The ſtalks are two feet high, upright, rediſh, branched, and firm.

Their leaves are few, and ſtand at diſtances.

The flowers are in all reſpects like thoſe of the *common columbine*, but that they are much larger: their colour is a beautiful blue.

The ſeeds are contained in capſules, five following each flower.

It is common in the ſouth of France, and flowers in June.

C. Bauhine calls it *Aquilegia montana magno flore*.

2. Red Virginian Columbine.

Aquilegia præcox rubra.

The root is long, thick, divided into ſeveral parts, and edged with fibres.

The leaves are numerous, and ſtand upon long footſtalks: they are divided into ſmall ſegments, notched at the edges, and of a very pale green.

The ſtalks riſe in the centre of this tuft; and are ſlender, weak, and but ſix or ſeven inches high.

They have a few ſmall leaves on them, divided like thoſe from the root, but into narrower ſegments.

The flowers are large, and of a bright red on the outſide, and yellowiſh at the mouth within: the horns or nectaria are not crooked, as in the common kind, but rigid and ſtrait.

The ſeeds are contained in ſlender capſules.

It is a native of North America: We have it in ſome curious gardens; where it varies from the natural ſize, but preſerves the character.

Cornutus calls it *Aquilegia pumila præcox Canadenſis*. Others, *Aquilegia Virginiana rubra*.

GENUS X.

LARKSPUR.

DELPHINIUM.

THE flower conſiſts of five petals, one of which runs out behind into a long ſpur: the ſeeds are contained in capſules; three of theſe naturally ſucceed each flower; but in ſome ſpecies they unite, and together form but one.

Linnæus places this genus among his *polyandria trigynia*; the filaments in each flower being numerous; and the rudiments of the fruit three naturally, and moſt frequently; though ſometimes only one, when the capſule is to be ſingle.

This plant ſhews how difficult it muſt be to form the characters of a genus, or larger diviſion, upon any one part; there being ſpecies of *larkſpur* in which the ſeed-veſſel is ſingle.

DIVISION I. BRITISH SPECIES.

Common Larkſpur.

Delphinium vulgare cæruleum.

The root is long, ſlender, whitiſh, ſimple, and has but few fibres.

The firſt leaves are ſmall: they ſtand upon ſhort footſtalks, and are divided into a few ſegments. They are of a pale green colour, and ſoon fade and wither.

The ſtalk is round, firm, and of a pale green, divided

divided into numerous branches; and not more than ſix inches high.

The leaves ſtand irregularly on it, and are divided into many longiſh and narrow ſegments: thoſe on the lower parts of the ſtalk are largeſt, and ſtand on footſtalks; thoſe toward the upper part have no footſtalks, and have but few diviſions.

The flowers ſtand on the tops of the branches: they are large, and have a long heel: their colour is a dead blue.

There follows each flower only a ſingle capſule for the ſeeds; but it is eaſy to ſee that it is compoſed of three, united one with another. This perfectly ſhews how the ſingle capſule happens in the other ſpecies.

It is common in the corn-fields in ſome parts of England, and flowers in June.

C. Bauhine calls it *Conſolida regalis arvenſis flore cæruleo*. Others, *Delphinium ſegetum flore cæruleo*.

From this inconſiderable plant riſe all the common varieties of the *garden larkſpurs*. There are diſtinct ſpecies to be named hereafter; but the *common*, *tall*, and *double larkſpurs* riſe only from this ſtock by culture.

It is agglutinant, and vulnerary. The conſerve of the flowers is good in thoſe purgings to which children are ſubject, attended with ſharp humours.

The juice of the flowers is good againſt diſorders of the eyes; and the whole herb made into an infuſion, againſt cholicks.

Some have diſputed theſe virtues of the *larkſpur*; but they tried the garden kind: that from the field is the right.

DIVISION II. FOREIGN SPECIES.

1. Great fennel-leaved Larkſpur.

Delphinium foliis feniculi.

This is a large and very beautiful ſpecies. The root is long, ſimple, white, and tufted with fibres.

The leaves that riſe from it are long, large, and divided into a multitude of ſlender, long ſegments; ſo that they have ſome reſemblance of thoſe of fennel; and they are of a dark green.

The ſtalk is robuſt, erect, and four feet high: it divides toward the top into many branches, and on theſe ſtand long ſpikes of flowers.

The leaves on the ſtalk reſemble thoſe from the root in their diviſion and colour: they ſtand alternate, and are of a fine freſh green: their ſegments are numerous, and very ſlender.

The flowers are large, and of the form of thoſe of the *common larkſpur*, but of a deeper and more beautiful blue. This is their natural, but not their conſtant colour; for they are ſometimes red, and ſometimes white.

It is a native of Spain, and is brought into our gardens; where it has all the advantages of culture, and all the varieties attending it.

C. Bauhine calls it *Conſolida regalis hortenſis flore majore ſimplici.*

2. Broad-leaved hairy Larkſpur.

Delphinium hirſutum latifolium.

The root is thick, and has few fibres.

The leaves that riſe from it ſtand on long footſtalks; and are large, hairy, and of a pale green: they are divided into many portions; but that not in the manner of the others, into narrow, graſſy ſegments; but into about five broad parts, which are each ſubdivided toward the ends by deep cuts, and are notched round the edges.

The ſtalk is thick, robuſt, erect, purpliſh, a little hairy, and three feet high; and is not much branched; often none at all.

The leaves are numerous on it, but ſtand irregularly: they reſemble thoſe from the root, but are ſmaller.

The flowers are large, with a long ſpur, and of a very beautiful blue: they ſtand in a long ſpike.

The ſeed-veſſels follow, three after each flower; and the ſeed is large, and dark coloured.

It is a native of the northern parts of Europe, whence it is brought into our gardens; where, from the leaves differing from the other *larkſpurs*, and in ſome degree reſembling thoſe of the aconites, it is commonly called *tall wolfs-bane*. Authors have alſo led themſelves into this error, by not ſufficiently conſidering that the flower is the part from which the reference to a genus is to be taken.

C. Bauhine calls it *Aconitum cæruleum hirſutum flore conſolidæ regalis.*

3. Smooth broad-leaved Larkſpur.

Delphinium latifolium glabrum.

The root is long, white, ſplit into branches, and hung round with fibres.

The leaves that riſe from it are large, broad, and deeply divided; but not at all like thoſe of the common kind of *larkſpur*, or even like the laſt kind: thoſe are divided ſomewhat in the fingered manner, their ſeveral broad ſegments running from the ſame point which is the top of the footſtalk; but theſe have rather the diviſion of the pinnated kind; for their ſeveral broad ſegments, which are about equal in number, ſtand in pairs, though they are not cut in to the centre, with an odd one at the end. They are of a duſky green, and not at all hairy.

The ſtalk is round, upright, and two feet and a half high.

The leaves ſtand irregularly, and are like thoſe from the root, divided into three or four pairs of deep ſegments, with an odd one at the end.

The flowers ſtand in ſpikes at the tops of the branches, and are ſmall and red.

The ſeeds follow in a ſingle capſule; but, like the *common larkſpur*, a capſule made up of three.

It is a native of the Greek iſlands, and of the warmer parts of Europe; and flowers in June.

C. Bauhine calls it *Conſolida regalis latifolia parvo flore.*

GENUS XI.

STAVESACRE.

STAPHISAGRIA.

THE leaves are thick, palmated, or divided into broad ſegments from their footſtalk, and in the whole of a rounded figure. The flowers conſiſt of five petals; the upper one of which is obtuſe in the fore part, and runs behind into a ſpur: the ſeeds are contained in capſules, three ſucceeding every flower.

Linnæus places this among the *polyandria trigynia*, and makes it a ſpecies of larkſpur.

The flower indeed differs little from that of the larkſpur, but the leaves ſufficiently.

Staveſacre has been called by that diſtinct name among the antients, and has peculiar virtues, which are not found in larkſpur: wherefore, in works intended for utility, the diſtinction ſhould be preſerved and ſupported, ſo far as nature gives foundation.

Strictly, that digitated larkſpur deſcribed laſt but one, might be called a kind of *ſtaveſacre*. The authors who have named it, we ſee know not well to what genus to refer it; and it beſt belongs to this, a genus diſtinguiſhed from larkſpur by broad digitated leaves; but for the ſame reaſon that I have not called *ſtaveſacre* a larkſpur, I have not named that larkſpur a *ſtaveſacre*; that is, becauſe it has not the qualities of *ſtaveſacre*.

The conſiderate reader will ſee in this inſtance how far the ſtrictneſs of method is to be indulged in works of this kind, and where it is to be made free with. There is no way beſides to write at once ſcientifically and uſefully.

Of this genus therefore, thus diſtinguiſhed, there is but one ſpecies, which is not known in Britain, except in gardens.

Staveſacre.

Staphiſagria.

The root is long, thick, woody, and furniſhed with many fibres.

The leaves that riſe from it are ſupported on long, thick, pale, and ſomewhat hairy footſtalks: they are large, of a deep unpleaſant green, and divided down to the ſtalk, into five, ſix, or more broad indented ſegments.

The ſtalk is round, thick, upright, two feet and a half high, and very much branched.

Its leaves ſtand irregularly, and in ſhape reſemble thoſe from the root.

The flowers ſtand in long ſpikes at the tops of the branches; and are large, and of a duſky blue. They much reſemble the flowers of the larkſpur; but they are larger.

The ſeeds are contained in capſules, three of which uſually, and ſometimes four, follow every flower.

They are large, hard, and rough.

It is common in the Levant, and in many of the warmer parts of Europe, and thrives very well in our gardens.

Linnæus calls it *Delphinium nectariis diphyllis foliis palmatis lobis integris.* C. Bauhine, and others, from the days of Theophraſtus, *Staphisagria.*

The druggiſts keep the ſeeds of *ſtaveſacre*: they have been given in ſmall doſes as a purge in dropſies, and other deſperate diſorders; but they are very rough.

Some chew them in the tooth-ach, in which caſe they bring a great deal of water into the mouth, and ſometimes are of ſervice; but their greateſt uſe is among the vulgar, for deſtroying vermin in their childrens heads; for this purpoſe they have the ſeeds coarſely powdered, and ſtrew them on; and this never fails.

GENUS XII.

WHITE DITTANY.

FRAXINELLA.

THE flower conſiſts of five petals, three of which turn upwards, and two or three ſideways; and it ſtands in a ſmall five-leaved cup. The ſeeds are contained in capſules; five of which follow every flower, and grow together.

Linnæus places this among the *decandria monogynia*, and allows it to be a genus diſtinct from all others; but he takes away its uſual and antient name *fraxinella*, and calls it *dictamnus*. This is doubly wrong, in that it introduces at the ſame time confuſion and error. Dictamnus is underſtood among the druggiſts and apothecaries as the name of another plant, the leaves of which are uſed in medicine, and which we ſhall deſcribe in its place: this they call from the place of its growth, *Dictamnus Creticus*; and they know nothing elſe by that name. There were ſome at one time who called the roots of *fraxinella*, *dictamnus albus*; but the leaves of the other *dittany* being alſo white, this created confuſion; wherefore it was wholly diſuſed. This author, in the too violent ſpirit of reformation, has brought it in again; and with reſpect to the other plant called *dittany*, the *dictamnus Creticus*, he makes that a ſpecies of origanum.

Branched Stonecrop

Large flowerid Stone crop

Great Houseleek

Tree Houseleek

Wild Columbine

Red Virginian Columbine

Common Larkspur

Great Fennel-leavd Larkspur

Broadleavd hairy Larkspur

Branchd Larkspur

Stavesacre

White Bryony

Blue Monkshood

Great Purple Monkshood

Little Blue Monkshood

Wholesome Monkshood

All the Latin writers from the earlieſt time call this plant *fraxinella*; and if this modern improver was diſpleaſed with that name, he might have changed it without taking that of *dictamnus*: it would certainly have been more juſtifiable to have called it *tragium*, that being the name by which it is called in the earlieſt Greek writers: the other however being univerſally received, is much fitter for the purpoſe; the Italian and Spaniſh *fraſſinelli*, and moſt other of the European names, being formed upon that word.

Of this genus there is but one known ſpecies; and this is not ſeen in Britain, except in gardens.

White Dittany.

Fraxinella.

The root conſiſts of a great number of thick, long, and tough fibres.

The leaves riſing from it are very large, and beautifully pinnated: they conſiſt each of about five pair of ſmaller, and a ſingle one at the end; and ſtand on ſhort footſtalks. They are of a pale green colour, broad, oblong, pointed at the ends, and ſcarce at all ſerrated at the edges; and they reſemble in ſome degree the leaves of the aſh-tree, in miniature.

The ſtalks riſe amidſt theſe leaves, which ſoon after fade and periſh.

They are robuſt, firm, branched, and two or three feet high.

Their leaves ſtand alternately; and are altogether like thoſe from the root, but ſomething ſmaller.

The flowers are of a beautiful pale red, often white; and have each ten long threads, which add to their beauty.

The ſeeds follow in five flatted pods.

The tops of this plant have a rediſh hairineſs, and there is a reſinous matter about them which ſticks to the fingers on touching them, and has a very fragrant ſmell.

This reſin is ſo inflammable, that if a lighted candle be brought near the ſtalk of the plant, ſo that the flame touch any of the reſin, the whole takes fire in an inſtant, and goes off with a remarkable exploſion. The plant will not be deſtroyed by this, but will recover its reſinous matter again in a few days; and the experiment may be repeated with ſucceſs.

It is a native of Italy and France, but ſtands very well in our gardens.

Its univerſal name among authors is *fraxinella:* it obtained this from the reſemblance of its leaves to thoſe of the aſh.

The bark of the root contains the principal virtue of the plant; and our druggiſts keep it: but they often ſell it old and decayed, and no root loſes its virtue ſooner. It is a cordial and ſudorifick when freſh dried. The antients eſteemed it a ſovereign remedy againſt poiſons and venemous bites: it is in eſteem in ſome places as a diuretick and deobſtruent, and againſt worms. If we had it more frequently freſh, and poſſeſſed of its full virtues, we ſhould value it highly:

GENUS XIII.

MONKS-HOOD.

ACONITUM.

THE flower conſiſts of five petals, and has no cup: the petals of the flower are of a ſingular form and ſituation: one ſtands uppermoſt, two are placed ſideways, and two below; the upper one is hooded; the ſide petals are broad, roundiſh, and ſtand inclining to one another; and the two lower are longer, and droop downwards: within the flower there alſo ſtand two glandules or nectaria on little pedicles, and with crooked tails. The ſeeds are in capſules, three after every flower.

Linnæus places this among the *polyandria trigynia:* the flower is ſo extremely ſingular, that it is wonderful it did not keep the genus diſtinct, and the ſpecies together in all authors. We muſt be ſurpriſed to ſee larkſpurs brought into it, the flower in this genus not having that great characteriſtick of the larkſpur, the ſpur or tail.

1. Blue Monks-Hood.

Aconitum cæruleum vulgare.

The root is long, thick, hard, divided into ſeveral parts, and furniſhed with numerous fibres.

The leaves riſing from it are very large, of a beautiful green, and divided into numerous, narrow, long ſegments.

The ſtalk is robuſt, erect, and five feet high.

The leaves ſtand irregularly, and in form reſemble thoſe from the root; but they are ſmaller.

They are placed on long footſtalks, and are divided to the ſtalk, into ſix or more long, narrow ſegments, which are again deeply notched at the edges, and often ſubdivided into others. Theſe are of a deep, but pleaſant green, and have a line running along their centre.

The flowers are numerous, and of a beautiful blue: they ſtand in long ſpikes on the tops of the branches, and are large, and of a fine full colour.

They are followed by capſules, three after every flower; in which are large rough ſeeds.

It is a native of Germany, and many of the northern parts of Europe; and flowers in July.

J. Bauhine calls it *Aconitum cæruleum, ſive* NAPELLUS. Lobel, *Napellus verus*; and moſt others ſimply *Napellus.*

It is a poiſonous plant. Dodonæus gives an account of five perſons who eat the root of it, through a miſtake, in their food at Antwerp, and all died. There have been other inſtances of the ſame kind; and it is ſaid to deſtroy ſuch wild beaſts as taſte or eat it. There is a tradition, how true we know not, that wolves tear up the root of ſome plants in winter for their food, and ſometimes miſtaking this, periſh by its poiſon: hence it has obtained the name of *wolfſbane*. It is ſaid, that, when kept in gardens, it is leſs fatal than wild; which is probable: all plants having their faculties, of whatever kind, more ſtrong in their wild ſtate than when brought into culture.

2. Great purple Monks-Hood.

Aconitum purpureum maximum.

The root is long, large, and furniſhed with abundance of fibres.

The firſt leaves are large, broad, and divided into a few great ſegments.

The ſtalk riſes to five feet in height, and is robuſt, firm, and very little branched.

The leaves ſtand alternately, and are like thoſe from the root: they are divided down to the footſtalk, into five principal parts, the middle one of which is largeſt. They are of a pale green, and deeply ſerrated.

The flowers ſtand in long ſpikes at the tops of the branches; and are very large, and of a beautiful deep purple: but they vary in this reſpect, being ſometimes red or fleſh coloured.

The ſeed-veſſels follow as in the other ſpecies, but the number is not certain; uſually there are three, ſometimes four.

It is common in the mountains of Germany, and flowers in Auguſt.

J. Bauhine calls it *Aconitum lycoctonum flore maximo*. C. Bauhine, *Aconitum cæruleo purpureo flore maximo, ſive Napellus quartus*.

3. Yellow Monks-Hood.

Aconitum flore luteo.

The root is compoſed of a multitude of thick entangled fibres.

The firſt leaves are large, broad, and in a manner rounded in their general form, but divided deeply into about five parts.

The ſtalk is robuſt, firm, erect, and four feet high.

The leaves ſtand irregularly on it, and have long footſtalks: they are like thoſe from the root, divided deeply into five parts; and thoſe are ſharp at the points, and ſerrated at the edges.

The flowers are ſmaller than thoſe of the *common monks-hood*, and of a beautiful yellow.

The ſeeds follow in capſules, three after every flower.

It is a native of many parts of Europe, and flowers in July.

The flowers are ſometimes of a deep yellow, ſometimes ſtraw-coloured, or whitiſh.

C. Bauhine calls it *Aconitum lycoctonum luteum*. J. Bauhine, *Aconitum folio platani flore luteo pallescente*.

4. Little, blue, flowered Monks-Hood.

Aconitum cæruleum minus.

The root is compoſed of a vaſt number of fibres interwoven with one another.

The firſt leaves ſtand on long footſtalks; and are broad, and indented deeply, rather than divided into ſegments.

The ſtalk is ſlender, purpliſh, and about two feet and a half high, but not very firmly erect.

The leaves ſtand irregularly on it: they are ſupported on footſtalks, and are divided ſomewhat deeper than thoſe from the root, but not ſo deeply as in moſt of the other ſpecies: the diviſion is into three principal parts, ſometimes into five; and theſe are cut deeply at the edges.

The flowers are large, and of a deep and beautiful blue: they ſtand in a particular manner, not in long ſpikes, as thoſe of the others, but ſingly at the tops of ſlender ſtalks riſing from the main ſtem.

It is a native of Italy, and flowers in May.

C. Bauhine calls it *Aconitum cæruleum minus, ſive Napellus minor*. Dodonæus, *Aconitum parvum cæruleum*.

All theſe ſpecies partake of the poiſonous nature of the firſt kind; but there is one reſembling them in form, and of the ſame genus that is ſalutary, and is eſteemed an antidote in particular againſt their poiſon.

5. Wholeſome Monks-Hood.

Anthora.

The root is compoſed of many irregular, thick, and tuberous pieces.

The firſt leaves are ſupported on long footſtalks, and are divided to the bottom into five ſegments: theſe are broad, and notched at the edges.

The leaves on it ſtand irregularly, and are divided into numerous, narrow, plain ſegments: they are of a pale green on the upper-ſide, and whitiſh underneath.

The flowers ſtand at the tops of the ſtalks and branches, and are like of the other *monks-hood* in form; of a beautiful yellow colour; and of a pleaſant, though ſlight ſmell.

The ſeeds follow in capſules, three, four, or five after each flower. The number of theſe is uncertain, but five is the moſt common. It is a native of Germany, and flowers in June.

C. Bauhine calls it *Aconitum ſalutiferum, ſive Anthora*. Others, *Anthora*, and *Antithora*.

The root is kept in the druggiſts ſhops, and was once much uſed as a cordial and ſudoriſick; there have been miſtakes about the kind, and they have been fatal. When freſh dried, this root purges vehemently; but that quality goes off in keeping. This is not particular to this plant: but it is a very ſufficient reaſon why it never ſhould be uſed; becauſe it will be impoſſible for the phyſician who preſcribes it to know its ſtrength.

GENUS XIV.

WINTER WOLFSBANE.

CAMMARUM.

THE flower ſtands in the centre of the leaf, and has no other cup; it is compoſed of ſix petals: the ſeeds are contained in capſules, in an uncertain number, properly ſix, but more frequently only four or five, after every flower.

No plant has been called by ſo many names, or referred to ſo many different genera, as this; and all improperly. The error has been in the authors not perceiving that it was a plant *ſui generis*, and belonged to none.

Linnæus places it among his *polyandria polygynia*, making it a ſpecies of hellebore: but it has ſix petals to the flower; whereas the hellebores have but five. This is a very eſſential diſtinction.

C. Bauhine calls it an *aconite*; but the aconites have only five petals in the flower, and thoſe diſpoſed in a particular manner: whereas in this there are ſix; and they are equal, and ſtand regularly.

J. Bauhine makes it a *ranunculus*, forgetting that the *ranunculi* have naked ſeeds, and this plant capſules. By ſome it is called *bulbus unifolius*; a very uncertain name, and alſo improper; the root being not bulbous, but tuberous: and by others it is called an *elleborine*; a genus from which it differs in form and characters more than from all.

In this uncertainty and impropriety of a name, I have given it a new one, diſtinct as the plant itſelf from all the other genera: this is *cammarum*, from an old Greek word καμμαρον, uſed by Dioſcorides and others as a diſtinction to ſome of their aconites; though, from their ſhortneſs, it is not eaſy to ſay which. In Dioſcorides it ſeems to mean the ſame with his *pardaliauches*; but in others it rather appears to point at this plant; which there is alſo reaſon to believe is the real and proper aconite of Theophraſtus, and the earlier Greeks. I have however preſerved its common Engliſh name.

We ſee, though commonly called by the name of *wolfſbane*, it is a plant altogether different from that genus, and properly conſtitutes one of its own; I have therefore called it by a new one. But as the plant is ſo perfectly known by its old Engliſh name, and by the Latin one, of which that is a tranſlation, *aconitum hyemale*, and is one which, from its power of doing harm, ſhould not be rendered liable to be miſtaken, great danger, as well as the loſs of great good, being neceſſarily to be guarded againſt in the conſideration of changing of names, I have preſerved its common with its new one; and wiſh, in caſes of this kind, the ſame practice may be followed by others.

Of this ſingular genus there is but one known ſpecies, which is very common in our gardens.

Winter Wolfſbane.

Cammarum.

The root is thick, tuberous, and large; black on the outſide, white within, and of a violently acrid and burning taſte. It has a few fibres; and, when it has ſtood ſome time on the ground, has other tuberous pieces growing from it.

The leaf and plant are one thing, for there is no other ſtalk.

Many footſtalks riſe from different parts of the root, each of which has at its top one leaf. The footſtalk is inſerted at the centre; and the leaf is of a rounded figure, but very deeply divided into narrow ſegments.

The flower grows in the centre of the leaf, and is large and yellow. It conſiſts of ſix petals, with a great tuft of threads in the middle, and among them the rudiments of ſeveral capſules.

When the flower falls, theſe ripen, and contain ſeveral yellowiſh, rounded, and flat ſeeds.

It is a native of Germany, and flowers in the depth of winter.

The root is a violent cathartick in a very ſmall doſe; and in any thing a larger quantity it is to be conſidered as a fatal poiſon.

GENUS XV.

PIONY.

PÆONIA.

THE leaves are divided into many parts. The flowers are large, and conſiſt of five petals: they ſtand in a five-leaved cup, and are ſucceeded by large capſules, two after every flower. The roots are tuberous.

Linnæus places this among his *polyandria digynia*, there being numerous filaments, and the rudiments of the two capſules in the centre of every flower. In this, however, he acknowledges there is no certainty; for, inſtead of two, theſe rudiments are in ſome ſpecies three, four, or five, to each flower.

flower. This ſhews the weakneſs of eſtabliſhing a method on ſuch parts of plants. There are enough that are determinate and certain; theſe are frequently precarious and ineonſtant: the others alſo, as well as more certain, are larger, and more conſpicuous.

1. Male Piony.

Pæonia folio nigricante.

The root is large, and irregularly tuberous: it naturally conſiſts of a thick, long, main body, to which there are frequently long tuberous pieces connected.

The leaves riſing from it ſtand on thick and robuſt footſtalks: they are very large, divided into many parts, or rather compoſed of many ſmaller, ſet upon a divided rib; and are of a blackiſh green.

The ſtalk is robuſt, round, upright, and three feet high.

Its leaves ſtand irregularly, and are like thoſe from the root, but ſmaller: they are divided in the ſame manner; and the ſeparate parts are broad, oblong, and pointed.

The flower is very large, and ſtands upon the top of the ſtalk: it is compoſed of five broad, obtuſe petals: they are of a very pale, whitiſh colour, with a tinge of purpliſh, and with purple veins: they have numerous ſhort threads in the centre, on which ſtand deep yellow buttons.

The ſeed-veſſels are large, whitiſh, and ſhaped like horns: they vary in number; ſometimes there are only two, but oftener three or five.

It is a native of the dark woods of Switzerland, and ſome other parts of Europe, and flowers in May.

C. Bauhine calls it *Pæonia folio nigricante ſplendido quæ mas.* Others, *Pæonia mas.*

2. Female Piony.

Pæonia foliis longioribus.

The root is compoſed of a great number of longiſh, thick, tuberous pieces, connected by ſlender tough fibres to a ſmall head.

The leaves are numerous: they ſtand on long footſtalks, and are divided into many parts, as in the male; but theſe ſeparate are larger and narrower, as is the whole leaf; and the colour is not the deep black hue of the other, but a pale, though not unpleaſant green, on the upper ſide; and they are whitiſh and mealy underneath.

The ſtalk is robuſt, firm, round, and upright: it is two feet in height, and branched. It is generally rediſh at the places whence the leaves proceed, elſewhere green.

The leaves ſtand irregularly on it, and are like thoſe from the root, compoſed of long parts, and irregularly divided.

The flowers are large, but not ſo large as in the preceding ſpecies: they are of a deep colour, and have in the ſame manner numerous threads, with yellow buttons in the centre.

The ſeed-veſſels are ſometimes only two, ſometimes more; and in this, as in the other, when they ſplit open, and the ſeeds are ripe, they make a beautiful appearance.

It is a native of the northern parts of Europe in thick foreſts, and flowers in the beginning of June.

It is more common in our gardens than the male; though the male is eſteemed to have moſt virtue; and it is from this ſpecies that our fine, large, double *pionies* are raiſed by culture.

C. Bauhine calls it *Pæonia communis, vel fœmina.* Others, *Pæonia vulgaris*, and *Pæonia fœmina.*

3. Dwarf Piony.

Pæonia pumila foliis radicalibus digitatis.

The root is compoſed of a long and large body, and has ſeveral great irregular tuberous pieces hanging to it.

The leaves that riſe from it ſtand on long footſtalks: they are not formed of ſeveral ſmaller placed upon a divided rib, but are of a palmated form, cut down to the ſtalk into nine or more long and ſlender diviſions.

The ſtalk is ſmall, round, weak, whitiſh, and a foot and a half high.

The leaves are placed alternately on it; and tho' thoſe from the root are only digitated, theſe are branched: they are compoſed of three principal parts, and each of theſe of ſeveral narrow and long ſegments.

The flower ſtands on the top of the ſtalk; and is large, of a deep red, and beautiful: it naturally has only five petals; but we ſee it in gardens with eight or more, and often double.

The ſeeds are preſerved in three or more capſules.

This is a native of Spain, and the warmer parts of Europe; and flowers in June.

C. Bauhine calls it *Pæonia tenuius laciniata ſubtus pubeſcens flore purpureo.* Others, *Pæonia fœmina pumila.*

The roots of *piony* are celebrated, and with great reaſon, againſt diſeaſes of the head and nerves. Thoſe of the *male piony* are beſt. The common practice of thoſe who ſell herbs and roots in our markets, is to bring the roots of the female in their place; but the difference will be known by the deſcriptions here given. The *male piony*, as the leſs beautiful, is the leaſt cultivated; but in thoſe places where the roots are propagated for the purpoſes of medicine, no other ſhould have admittance.

Beſide being good in nervous caſes, it is excellent in obſtructions of the liver; and there are very conſiderable cures recorded to have been performed by it.

The beſt way of giving it is in the powder of the root, freſh dried: twelve grains is a doſe, and will do great ſervice in all nervous complaints, headachs, and convulſions.

It will alone cure that diſagreeable diſorder, the night-mare.

There is an opinion, that being hung about the neck of children, it will prevent the convulſive diſorders to which they are liable in cutting their teeth;

teeth; and hence aroſe the practice of anodyne necklaces. The opinion, however ſlightly founded, is as old as Galen: he names a girl who was kept free from the epilepſy eight months by wearing a piony root about her neck, and immediately ſeized with the diſeaſe on droping it.

There are other grave authors who confirm the ſame account: but whatever may be its virtue in this manner of application, this I know from experience, that taken inwardly it is a very great and excellent medicine, and deſerves to be brought more into uſe.

GENUS XVI.

INDIAN MALLOW.

ABUTILON.

THE flower is compoſed [illegible]ve petals: the ſeeds are contained in capſules, a great number of which follow every flower. The leaves are undivided.

Linnæus places this among his *monadelphia decandria*, and joins it with ſome others not allied to it, under the name of *ſida*: others have joined it with the mallows, which is a much greater error; thoſe plants belonging to a former claſs, as having their ſeeds naked, whereas the *abutilon* has them encloſed in capſules, as the reſt of this claſs.

1. Yellow Indian Mallow.

Abutilon flore flavo.

The root is long, thick, and furniſhed with many ſtrong fibres.

The leaves that riſe from it ſtand on long foot-ſtalks: they are large, and of a heart-faſhioned ſhape, indented at the ſtalk, and pointed at the end. They are of a whitiſh colour, ſoft to the touch, and a little notched at the edges.

The ſtalk is robuſt, firm, upright, branched, and three foot high: it is whitiſh and woody: The outer rind eaſily ſlips off, and there is a woody ſubſtance within.

The leaves ſtand irregularly on it: they have ſlender footſtalks, and are of the ſame form with thoſe from the root, and of the ſame ſoftneſs.

The flowers are moderately large, and of a beautiful ſtrong yellow, ſtriated, and full of threads, with their buttons in the centre.

The capſules which follow each flower are numerous, ten, twelve, or more. They are connected at their tops; ſo that they form a large head.

It is a native of the Eaſt, and of ſome parts of Europe. It flowers in June.

C. Bauhine calls it *Althæa Theophraſti flore luteo.* Others, *Abutilon.*

2. White Indian Mallow.

Abutilon album.

The root is a ſmall, long body, producing a great number of thick and large fibres.

The firſt leaves are large, oblong, ſharp pointed, and ſtand on ſlender footſtalks: they are of a pale green, and ſomewhat hairy, but have not the ſoftneſs of the others.

The ſtalk is round, upright, firm, hairy, and very little branched: the leaves hang irregularly upon it, drooping down. They are of the ſame form with thoſe from the root, but ſma ler.

The flowers ſtand on long footſtalks, and are white, or nearly ſo, with a deep yellowneſs in the centre.

The ſeed-veſſels are numerous, and form a large head.

It is frequent in Aſia, and flowers in June.

J. Bauhine calls it *Abutilon Indicum.*

The virtues of theſe plants are not known in our part of the world; but in the Eaſt they are famous in the gravel, and ſuppreſſions of urine. They are of the mallow kind, as the taſting of their roots will ſhew any one accuſtomed to theſe reſearches; but they are not ſo mucilaginous as our European ſpecies, ſo that they have probably leſs virtue.

They are alſo commended in fevers, but we know not if with reaſon.

GENUS XVII.

SWEETBEARD.

BARBA CAPRÆ.

THE flower is ſmall, and conſiſts of five petals. It ſtands in a ſmall cup divided into five ſegments, and is followed by three ſmall, ſeparate capſules. The flowers ſtand in long tufts, and the leaves are winged.

There are male and female plants in this genus, but they differ only in this, that on the male plants the flowers have only threads, and in the female only the rudiments of the capſules in the centre.

Linnæus, in his *Genera Plantarum*, places this among the *diœcia polyandria*; for this reaſon making it a diſtinct genus, under the name of *aruncus*; but in his *Species Plantarum* it is removed from that claſs. It there ſtands among the *icoſandria pentagynia*, and is made a ſpecies of ſpiræa.

I can without much cenſure reconcile this contradiction: there are plants of the *barba capræ* that have flowers with both the threads, and rudiments of the capſules in them; though there are others that have only male, and others that have only female flowers. This is the language of the modern botaniſts; and according to the ſame dialect, thoſe flowers which have both the threads and rudiments of capſules are called hermaphrodites: theſe led Linnæus to place the plant among his *icoſandria*, againſt his former judgment. He had truth on his ſide in both caſes; for it is nature varies: but we have hence this leſſon, Thoſe accidents are unfit for the claſſical diſtinctions of plants, which are not conſtant and certain; this is not the only genus in which there are ſometimes male flowers on one plant and female on another, though there are alſo in ſome plants of this kind hermaphrodite flowers: it is a proof added to the many we have had occaſion to mention before, and which will be ſtrengthened by many others hereafter, that this method was taken up too haſtily, and that upon better knowledge of nature, men will be obliged to lay it down.

Of this genus there is but one known ſpecies. It has much the aſpect of the common meadowſweet, except in the diſpoſition of the flowers. Moſt authors have joined it with that plant; and indeed it comes very near its nature. The ſeeds of meadowſweet are covered, as we have ſhewn, with a kind of cruſt; and in this plant they have but very rude capſules. However, the diſtinction is preſerved: nature on all occaſions goes off gradually from one claſs to another: this would have been ſeen if men had regarded the greater and more diſtinctive parts of plants with that attention they have ill beſtowed upon the more minute and frivolous. *It is here the gentle ſtep is made from* the herbs with ſeveral naked ſeeds after every flower, to thoſe in which each flower is followed by ſeveral capſules.

Sweetbeard.

Barba Capræ.

The root is large, thick, long, and furniſhed with many fibres. It has a rediſh bark, a woody ſubſtance within that, and in the central part a ſpungy pith.

The leaves riſe in a great tuft, but commonly wither when the ſtalk gets ſtrength. They are placed on long footſtalks, and are compoſed of three principal parts, each of which conſiſts of about five ſmaller leaves, diſpoſed in the pinnated manner in two pairs, with an odd one at the end: theſe are oblong, ſerrated, and pointed at the ends.

The ſtalks are four feet high, round, ſtriated, erect, and but little branched. They have the ſame kind of leaves on them, and at their tops bear numerous flowers in long ſtrings, ſeveral connected toward the bottom, or riſing ſo near one another that they form a tuft reſembling a long, white beard.

The flowers are white, little, and of a ſlight but agreeable ſmell.

It is a native of the warmer parts of Europe, and flowers in July.

C. Bauhine calls it *Barba capræ floribus oblongis.* J. Bauhine, *Barba capri.* We in Engliſh ſometimes tranſlating the Latin name, call it *goats-beard*; but as that is with us the name of another plant, I have taken the liberty of varying it a little, preſerving the word beard, and adding for its farther character, its fragrant ſcent; many of the common writers have called it *ulmaria major*, the *greater meadowſweet*.

The flowers are eſteemed cordial and ſudorifick.

The bark of the root alſo poſſeſſes the ſame virtue, with a mixture of aſtringency. This recommends it among the country practiſers, where common, in fevers attended with diarrhœas.

Theſe are the plants properly and diſtinctly belonging to the preſent claſs; from which we are to advance to another, which is very comprehenſive, containing the plants, with a flower conſiſting of one petal, and ſucceeded by a ſingle capſule: but in our way we are to regard an intermediate genus, which happily connects theſe two, or according to the cuſtom of nature, here often remarked, makes the progreſſion eaſy.

The END of the SECOND CLASS.

THE

THE BRITISH HERBAL.

CLASS III.

Plants whoſe flower conſiſts of a SINGLE PETAL, *and is ſucceeded by* SEVERAL CAPSULES.

THIS is a claſs not diſtinguiſhed by any author, though eſtabliſhed by nature in the plaineſt, moſt determinate, and moſt diſtinct manner. It contains only a few genera, but it ſerves very happily in forming a natural method, and it is wonderful men of ſcience have overlooked it: not that Linnæus has, for his attention has been wholly bent on the leſſer, ſo that he muſt naturally loſe ſight of theſe greater objects; but that Ray in particular ſhould not obſerve it is ſtrange.

It is here the firſt inſtance occurs of the neceſſity there is, in a work of this kind, after conſulting the beſt authors, to examine nature; and where they are defective, to compleat the ſyſtem from her ſtores.

We have begun with plants whoſe flower conſiſting of ſeveral petals is followed by many naked ſeeds; we have given in the ſecond claſs plants whoſe flower conſiſts, as in thoſe in the firſt, of ſeveral petals, and is followed by ſeveral capſules containing the ſeeds: from theſe, following our method in thoſe plants whoſe flowers are largeſt, plaineſt, and moſt conſpicuous, we ſhould be led, if the ſyſtems of others only were our guides, to thoſe plants whoſe flower conſiſts of a ſingle petal, and is followed by a ſingle capſule; but obſerving nature, we perceive that ſhe has placed between theſe an intermediate claſs: this conſiſts of thoſe plants which have a flower formed of a ſingle leaf, and followed by more than one capſule. Theſe are the plants we compriſe in our preſent new eſtabliſhed claſs, placing it between the ſecond and fourth; between thoſe plants whoſe flower conſiſts of ſeveral petals, and is followed by ſeveral capſules, and thoſe which have it of one petal, followed by one capſule. Thus we ſhall trace nature in her own path; and view her as ſhe makes her regular progreſs and her gradual deſcent with no greater gap between.

Certainly in all other ſyſtems there was an interruption here; but this ſmall arrangement fills up the ſpace, and makes all regular.

Linnæus ſcatters the few plants belonging to this claſs over his works, and Tournefort, and Ray, not attending to the diſtinction, great and obvious as it is, of plants with a flower compoſed of many petals, and ſuch as have it conſiſting but of one, place theſe confuſedly among others.

SERIES I.

NATIVES OF BRITAIN.

GENUS I.

NAVELWORT.

COTYLEDON.

THE flower conſiſts of a ſingle petal; this is of a tubulated form, and divided into ſeveral ſegments at the edge. The ſeeds are contained in capſules, five of which follow every flower.

Linnæus places this among his *decandria pentagynia*, between woodſorrel, which has its ſeeds in a ſingle capſule, and ſtonecrop, which has numerous petals in the flower. There are indeed in this ten threads in the centre of each flower, and five rudiments of capſules among them; this, in the ſyſtem pro-

poſed

poſed by that author, juſtifies the placing it in that claſs; but when we ſee that its flower conſiſts of a ſingle petal, and that its fruit is a cluſter of five capſules, we may ſay with freedom, nature has not placed it between ſtonecrop and woodſorrel.

There is a plant uſually confounded with the houſeleek that will naturally follow it, though in a ſeparate genus; and this is the only one with which nature has given it any alliance.

DIVISION I. BRITISH SPECIES.

Wall Pennywort.

Cotyledon radice tuberoſa.

The root is roundiſh, tuberous, and furniſhed with many fibres from the bottom.

The leaves are numerous, and riſe in a thick, regular cluſter. They are ſupported on foot-ſtalks of three inches long, and theſe are inſerted, not at one ſide, but in the centre, the leaf ſpreading every way into roundneſs from them. Theſe leaves are of a bluiſh green, prettily notched round the edges, and of a watery taſte.

The ſtalk is eight inches high, and is round, and tolerably firm. Toward the top it divides into two or three branches, and on theſe hang numerous flowers in long ſpikes.

They [illegible] ſmall, gree[illegible]h, and dented at the rim.

The capſu[illegible]re oblong, ſwe'led, and pointed; and they contain numerous ſmall ſeeds.

It is [illegible]tive of England, but not common. I have [illegible] on walls near Shepon Mallet in Somerſetſhire.

C. Bauhine calls it *Cotyledon major.* J. Bauhine, *Cotyledon vera radice tuberoſa.* In Engliſh we call it *kidneywort*, *navelwort*, and from its growing on walls and the roundneſs of its leaves, which are ſuppoſed to reſemble pieces of money, *wallpennywort*.

It is cooling and diuretick, but is not much uſed.

DIVISION II. FOREIGN SPECIES.

Yellow Navelwort.

Cotyledon flore aureo.

The root is thick, and often tuberous, and has numerous fibres.

The firſt leaves riſe in a large cluſter, and are of an oval figure, broadeſt at the top, and dented at the edges. They are of a bluiſh green colour, of a fleſhy ſubſtance, and of an inſipid taſte.

The ſtalk is round, ſmooth, greeniſh or purpliſh, erect, and but little branched.

Its leaves ſtand irregularly: they have no foot-ſtalks, but join the ſtalk by a broad baſe: they are of the ſame ſhape with thoſe from the root, but ſomewhat narrower and more indented.

The flowers are very numerous and beautiful. They ſtand in cluſters on ſlender footſtalks, and are tubular, divided into four ſharp ſegments at the edge, and of a beautiful yellow.

The capſules are ſmall, and pointed. As the ſegments of the flower are four, theſe alſo are four; and the threads, which are ten in the common kind, are only eight in this. Linnæus, however, ranks it in the ſame genus with the other, acknowledging this variation. It is a proof that, however he has taught others to conſider the number of threads conſtituting the claſſical, as well as generical characters of plants, himſelf knew very well they were not ſufficiently determinate for that purpoſe.

Thoſe who love needleſs diſtinctions may make two genera of theſe two ſpecies, and give a new name to the laſt; but they who ſtudy plants for uſe will hold ſuch diſtinctions very ſlightly. This ſpecies is a native of Egypt and the Eaſt Indies.

Van Royen calls it *Cotyledon foliis laciniatis floribus quadrifidis.*

They uſe it in Egypt as a diuretick, giving the juice in a large quantity againſt the gravel.

GENUS II.

PERIWINKLE.

PERIVINCA.

THE flower conſiſts of a ſingle petal which is of a tubular form in the lower part, growing wider upwards, and at the rim is divided into five ſegments. The ſeeds are contained in long capſules, two of which follow every flower.

Linnæus places this among the *pentandria monogynia*, becauſe there are in each flower five threads, and but a ſingle filament from two rudiments of capſules.

His general rule for the arrangement of plants according to theſe parts, is from the diviſion of the ſtyles, or number riſing from the rudiments, which he calls germina: this ſtyle ſerves to receive the duſt from the buttons on the threads, and to convey it to the rudiments. The ſtyle in *periwinkle* is ſingle indeed, but the rudiments, which are the eſſential parts, that being but ſubſervient to them, are two; therefore, as himſelf acknowledges, this genus more juſtly belongs to the *digynia*, or thoſe which have

have the female parts double. One ſhould ſmile at the perplexity that riſes from this unſubſtantial method, but that it has miſled ſo many. What is an author to do, who has ſet up a ſyſtem dependent on complex, as well as minute parts, when one portion of the ſame object, as in this inſtance, determines the plant to one aſſortment, and another to another. It is to this we owe thoſe frequent exceptions the author has himſelf made to his generical characters; and the many others, thoſe who ſhall obſerve nature heedfully, muſt make for him.

DIVISION I. BRITISH SPECIES.

Small Periwinkle.

Pervinca minor.

The root is long, tough, ſlender, and full of fibres.

The ſtalks are long, but weak. They are tough, but want firmneſs; ſo that they lie upon the ground, and frequently take root at the joints: hence, when the plant has ſtood any time we commonly ſee a thick tuft of it.

The leaves ſtand in pairs: they are oblong, broad, even at the edges, pointed at the ends, and have no footſtalks. They are of a firm ſubſtance, and deep green colour.

The flowers ſtand on long footſtalks, which riſe from the boſoms of the leaves: they are large, and of a beautiful blue.

The ſeed veſſels are ſharp-pointed, two follow every flower, and there are in them many large, oblong ſeeds.

It is a native of our woods, but not common. It flowers in June.

C. Bauhine calls it *Clematis daphnoides minor*. Others, ſimply, *Clematis daphnoides*, or *Vinca pervinca*.

DIVISION II. FOREIGN SPECIES.

Great Periwinkle.

Pervinca major.

The root is a great tuft of fibres.

The ſtalks are numerous, firm, woody, and tolerably erect.

The leaves ſtand in pairs, and are placed on ſhort footſtalks; they are broader than thoſe of the ſmall kind in proportion to their length, and are more of an oval figure; they are even at the edges, and broad at the baſe, and pointed at the ends.

The flowers ſtand on long footſtalks, riſing from the boſoms of the leaves, and are large and blue.

The ſeeds follow in two long capſules, pointed at the ends.

It is frequent in the woods of Germany, and flowers in July.

C. Bauhine calls it *Clematis daphnoides major*. Others, *Vinca pervinca major*.

Some have ſuppoſed this a variety of the preceding ſpecies, imagining that it only differed in ſize; but they ſhould have obſerved the footſtalks and form of the leaves, and they would have found that the ſize of the plants, though the moſt obvious, is not the moſt eſſential mark of their diſtinction.

GENUS II.

SENGREEN.

AIZOON.

THE flower is large, and conſiſts of a ſingle petal ſlightly divided into ten ſegments. The ſeeds are contained in capſules, a great number of which ſucceed every flower. The leaves grow in round cluſters in the manner of theſe of houſeleek; which the plant in its general form greatly reſembles.

No author has ſeparated this, perfectly ſingular as it is, or allowed it a diſtinct genus: it has been univerſally ranked as a ſpecies of houſeleek, though it belongs to a ſeparate claſs.

Linnæus makes it a ſpecies of *ſempervivum*; though he has eſtabliſhed, in the generical character, that *ſempervivum* has a flower conſiſting of twelve petals, whereas the flower of this plant has but one. This refers it plainly and neceſſarily to the preſent claſs, and renders a new name neceſſary for it; but, to avoid perplexity, I have given it one that has always been ſuppoſed to belong, though in an undetermined manner, to the houſeleek kind: it is very well applicable to this plant; the leaves continuing all the year freſh and green.

Of this genus there is but one known ſpecies.

Sengreen.

Aizoon.

The root is long, ſlender, and edged with fibres.

The leaves that riſe from it are fleſhy, oblong, and pointed: they grow in natural cluſters, but in a very ſingular manner. The cluſters are of a roundiſh form, as in the common houſeleek, but have not that open diviſion: they are rather globular. In winter they are of a greyiſh green, and ſtand ſeparate, as in other plants of this kind; but toward ſpring they aſſume another form: they have a multitude of long, fine, and ſlender hairs growing

ing among them; and these, connecting their tops, form a variety of angular figures, so that the whole tuft of the plant appears as if wrought about with cobwebs.

From the centre of the larger of these tufts, rises a stalk of a foot high, round, thick, fleshy: toward the lower part it is covered with leaves, but in a manner naked higher up; the leaves there standing separate and distant.

These are of the shape of the lower leaves, but narrower: they are fleshy, and they, as well as the stalk, usually are reddish.

At the top there spring two or three little branches, which spread out and support the flowers.

These are very large, and of a beauiful red. They are not like those of the houseleek, composed of twelve petals; but formed of one only, and that divided but into ten segments.

The seeds are contained in capsules, several of which succeed every flower.

It is a common plant on the Alps, and in many parts of Switzerland; where it roots among the most naked rocks, and when in flower makes a beautiful appearance.

C. Bauhine calls it *Sedum montanum tomentosum*.

The END of the THIRD CLASS.

THE

THE

BRITISH HERBAL.

CLASS IV.

Plants with the flower formed of a SINGLE PETAL, *plain, and of a regular form, and ſucceeded by a* SINGLE CAPSULE.

THIS is a claſs of nature's forming, and is perfectly diſtinct from all the others; yet the modern methods in botany do not preſerve it.

The plants which compoſe it are very numerous: they are the moſt plainly and evidently connected together by nature, perhaps of any in the whole vegetable kingdom; yet Linnæus ſcatters and ſeparates them throughout his works; and Mr. Ray, who has collected and preſerved them together, includes among them thoſe of our fifth or next ſucceeding claſs, which have the petal though ſingle, yet far from plain.

He diſtributes theſe by a ſubdiviſion, under two heads; but they properly conſtitute two claſſes. Bindweed and the bell-flower are naturally allied by the ſhape of their flower, and belong to the ſame claſs; but bindweed and toadflax, though they agree in having a ſingle capſule after every flower, and their flower compoſed of one petal only; yet are ſo palpably and evidently different by the form of that petal, that they are naturally ſeparated.

SERIES I.

NATIVES of BRITAIN.

GENUS I.

HENBANE.

HYOSCYAMUS.

THE flower conſiſts of a ſingle petal, and is tubular, and divided lightly into four ſegments at the rim: theſe are all obtuſe, but one is larger than the others. The ſeed-veſſel is a ſingle capſule, covered at the top, and divided into two parts within.

Linnæus places this among the *pentandria monogynia*; the threads in the flower being five in number, and the rudiments of the fruit ſingle.

DIVISION I. BRITISH SPECIES.

Common Henbane.

Hyoſcyamus vulgaris.

The root is very long, tough, white, woody, and furniſhed with many fibres.

The ſtalks are round, hard, woody, tough, and variouſly and irregularly branched.

The leaves ſtand irregularly: they ſurround the ſtalk at their baſe; and are long, narrowiſh, pointed at the ends, and very deeply notched at the edges. Their colour is a greyiſh green, and they have a very ill ſmell.

The flowers are numerous, ſingular, and not without beauty when examined nearly: they are large, and open at the top, of a greyiſh duſky colour, a tinct very uncommon in flowers, and full of veins.

The ſeed-veſſels follow one after every flower;

and they are large, and contain a great quantity of ſeeds: theſe are brown, rough, and of an irregular figure.

It is common in waſte places, and flowers in July.

C. Bauhine calls it *Hyoſcyamus vulgaris et niger*. Others, *Hyoſcymus niger*.

This is the only ſpecies of *henbane* that is a native of Britain, and it is poiſonous in its qualities.

DIVISION II. FOREIGN SPECIES.

1. White Henbane.

Hyoſcyamus albus.

The root is long, thick, white, and furniſhed with numerous fibres

The leaves that riſe from it ſtand on long hollowed foot-ſtalks; ſo that in the firſt appearance it differs greatly from the other, whoſe radical leaves riſe without any ſtalk from the ground: theſe are large, broad at the baſe, bluntly pointed, and deeply ſinuated at the edges.

The ſtalk is round, firm, hairy, and three feet high: it is more erect, and leſs branched, than the other.

The leaves ſtand irregularly: they have long footſtalks, and are like thoſe from the root.

The flowers grow ſingly in the boſoms of the leaves, and they have ſhort footſtalks, and are large and white. The whole plant is thickly hairy.

It is a native of the warmer parts of Europe, and flowers in Auguſt.

C. Bauhine calls it *Hyoſcyamus albus major*. Others, *Hyoſcyamus albus*.

Thoſe who, following C. Bauhine, call this the *greater white henbane*, deſcribe a variety of it under the name of the *ſmaller white henbane*.

This differs from the other in nothing, but that it has grown on a barren ſoil, and is ſtarved and ſtunted.

2. Golden Henbane.

Hyoſcyamus aureus.

The root is long, thick, woody, white, and furniſhed with fibres.

The leaves that riſe from it are broad, ſhort, deeply dented, and ſupported on long footſtalks: they are of a whitiſh green, and ſoft to the touch.

The ſtalks are numerous, weak, whitiſh, and a foot and a half high.

The leaves ſtand irregularly on them, and have long footſtalks: they in all things reſemble thoſe from the root.

The flowers are moderately large, and of a beautiful gold yellow: they are more deeply divided than thoſe of the *common henbane*, and have longiſh footſtalks: they ſtand partly at the top of the plant, and partly in the boſoms of the leaves.

A ſingle ſeed-veſſel follows each flower, containing numerous ſeeds.

It is a native of the Greek iſlands and of Egypt, and flowers in July.

C. Bauhine calls it *Hyoſcyamus Creticus luteus*; but he, without much reaſon, divides it into two ſpecies, a greater and leſſer: theſe are only varieties.

Alpinus calls it *Hyoſcyamus aureus*.

3. Little Henbane.

Hyoſcyamus puſillus.

The root is white, ſmall, and longiſh, and has a few fibres.

The leaves riſe in a little cluſter of five or ſix together, and are ſupported on long, ſlender footſtalks: they are oblong, broadeſt in the middle, and deeply indented at the edge.

The ſtalk riſes among theſe; and is round, ſlender, upright, not at all branched, and eight or ten inches high.

The leaves ſtand at diſtances alternately: they are of the ſame form with thoſe from the root, but ſmaller, and not at all indented at the edge: they are alſo blunter at the point.

The flowers are moderately large, and of a beautiful yellow; one ſtands uſually in the boſom of each leaf from top to bottom; and frequently there are little tufts of young leaves riſe with them.

The ſeeds are large, and are contained in a ſingle capſule.

It is a native of many parts of America, and flowers in July.

Plukenet calls it *Hyoſcyamus puſillus aureus amenianus antirrhini foliis glabris.*

All the *henbanes* are powerfully ſoporifick, inſomuch that many of the ſpecies are accounted poiſonous: none ſo much as the common Engliſh *henbane*: but the apothecaries have evidence that the charge is not altogether well grounded. What they are ordered to uſe in ſome compoſitions, is the ſeed of the *white henbane*; but thoſe of the black being more readily at hand, are too often ſold to them by the druggiſts in their place.

This ſeed however is more violent in its operations, and ſhould be excluded the ſhops, the others having all the good qualities without the danger.

The ſeed of the *white henbane* is the beſt of all: it is cooling, emollient, and excellent againſt pain; it alſo moderately and quietly produces ſleep, without diſturbing the head in the manner of the black.

It is excellent in coughs, it abates the pain in cholicks, and is of great virtue againſt ſpitting of blood, profluvia of the menſes, and all other hemorrhages

The leaves boiled in milk and water, and applied as a pultice, are excellent in the ſciatica. The root has the ſame virtue with the ſeeds in an inferior degree; and is hung about childrens necks in ſome places, as the piony root is in others, in order to their cutting their teeth without pain. In many parts they make necklaces, with pieces of *henbane* and pieces of the piony root interchangeably, and relate wonderful things concerning their effects. Of this we have ſpoken before, under the article *Piony*.

Narrow leavd Bindweed

Sea Bindweed

Syrian Scammony

Cretic Scammony

Silver Bindweed

Little Blue Bindweed

Small leavd Bindweed

Many leavd Bindweed

Oak leavd Bindweed

Cretic Bindweed called Lorygonium

Ivy leavd Bindweed

Feather leavd Bindweed

Little Spring Gentian

Gentian

Great flowerd Gentian

Great Gentian

Crest leavd Gentian

Great Blue Gentian

GENUS II.

BINDWEED.

CONVOLVULUS.

THE flower is large, and conſiſts of a ſingle petal, ſpread open, rarely indented, and often folded: the ſeeds are numerous, and are contained in a ſingle capſule: the cup is formed of a ſingle leaf, divided into five parts; and remains with the capſule when the flower is fallen.

Linnæus places this among the *pentandria monogynia*; there being five threads in every flower, and a ſingle rudiment of a fruit or capſule.

DIVISION I. BRITISH SPECIES.

1. Great Bindweed.

Convolvulus major.

The root is long, white, ſlender, and creeping.

The ſtalks are numerous, round, ſlender, weak, and very long: they are ſmooth, of a yellowiſh colour; and tough, and will climb about buſhes till they reach ten or fifteen feet in height.

The leaves ſtand irregularly, and have long footſtalks: they are large, broad, cut off as it were behind at the ſtalk, not going to ſharp points, as in the leſſer kind, and ſharp at the end: they are thin, ſmooth, undivided at the edges, and of a pale green.

The flowers riſe from the boſom of the leaves, and ſtand ſingly on long footſtalks: they are very large and white.

The ſeed-veſſel is large, and the ſeeds are numerous.

It is common in hedges, and flowers all ſummer.

C. Bauhine calls it *Convolvulus major albus.* Others, *Convolvulus major.* Our common people call it *Bearbind.*

2. Common little Bindweed.

Convolvulus minor vulgaris.

The root is ſlender, and has many fibres.

The ſtalks are numerous, round, green, weak, and almoſt a foot long: the plant is not able to ſupport itſelf; but it does not climb among buſhes as the *great bindweed*, but ſtraggles upon the ground.

The leaves ſtand irregularly, and are numerous: they are broad, ſhort, of a pale green, undivided at the edges, pointed at the end, and running into two points alſo at the ſtalk, in the manner of an arrow head.

The flowers riſe from the boſoms of the leaves: they ſtand on footſtalks; and are large, and of a pale red, ſometimes white.

The ſeed follows in a large capſule.

It is common by way-ſides, and flowers in May, and during the reſt of the ſummer.

C. Bauhine calls it *Convolvulus minor arvenſis.* Others, *Convolvulus minor.*

This and the preceding both poſſeſs the ſame virtues: they are rough purges; and, to thoſe conſtitutions that can bear ſuch medicines, are good in dropſies, and other diſorders from obſtructions of the viſcera. The roots poſſeſs the principal virtue, and they are beſt freſh. The country method is to preſs out the juice, and give it with ſtrong beer. The root of the *great bindweed* is what they commonly uſe on this occaſion. It is ſingular, that hogs eat this root often in conſiderable quantity, without any manifeſt effect.

It may be uſeful in the country, where peoples conſtitutions are rough, and milder medicines are not to be had; but it is not worth bringing into the ſhops.

3. Narrow-leaved Bindweed.

Convolvulus puſillus angueſtifolius.

The root is long and ſlender, and has a few fibres.

The ſtalks are numerous, round, weak, and ſix inches long: they lie upon the ground, and their leaves grow principally on one ſide.

Theſe ſtand ſingly at ſmall diſtances, and are very narrow, and of a conſiderable length: they hoop round the footſtalks, which are ſhort and ſlender, in the manner of the head of an arrow, but the heads are more rounded; the edges are not at all indented, and they end in a ſharp point.

The flowers have long, ſlender footſtalks, and commonly ſtand oppoſite to the leaves, tho' not ſo numerous: they are ſmall, and of a pale fleſh colour.

The capſule of the ſeed is alſo ſmall.

It is a native of our corn-fields, but not common. It flowers in June.

Plukenet calls it *Convolvulus anguſtiſſimo folio noſtras cum auriculis.*

4. Little Bindweed, with a deep divided flower.

Convolvulus puſillus flore profunde ſecto.

The root is long, ſlender, and brown.

The ſtalks are round, weak, numerous, and five or ſix inches long.

The leaves are numerous, ſhort, broad, and of a pale green.

The flowers are ſmall, of a faint red colour; and are compoſed of ſingle petals as the others, but they are deeply divided into five parts.

The ſeeds are contained in ſhort capſules.

It grows with us in barren places. Mr. Rand, who

who firſt found it in Kent, called it *Convolvulus flore minimo ad unguem fere ſecto*; and under this name it is placed in Dillenius's edition of the *Synopſis of Britiſh plants*.

5. Sea Bindweed.

Soldanella vulgaris.

The root is long, ſlender, and creeping.

The ſtalks are round, ſtriated, weak, and uſually of a purpliſh colour: they grow to a foot or more in length, and lean upon the ground.

The leaves ſtand irregularly: they have long footſtalks, and are of a rounded figure, rather broader than long, and have a kind of ears at the ſtalk.

The flowers are large, and of a beautiful deep red: they have long footſtalks, and riſe ſingly from the boſoms of the leaves. The ſeed-veſſel is ſhort.

The ſtalk is tough, the leaves are of a fleſhy thick ſubſtance, and the plant abounds with a milky juice.

It is common on our ſea-coaſts, and flowers in June.

C. Bauhine calls it *Soldanella maritima minor*. Others, *Soldanella vulgaris*.

We have no other ſpecies of *ſoldanella* a native of this country.

The roots and leaves of this ſpecies are a very violent purge: they are much more ſharp in their operation than thoſe of the *common bindweed*; but for conſtitutions that can bear them, they may be uſeful. There have been inſtances of great good done by this plant in dropſies.

Some upon the ſea-coaſts pickle the young tops in the manner of ſampire; and even in this way they purge very briſky. In this form they are a popular remedy againſt the ſcurvy; whence the plant has obtained the name of *ſcurvygraſs* among the common people; that name of right belonging to a quite different plant.

The beſt way of giving it is, to dry and powder the root; but even in this ſtate it will work very violently. Its proper correctives are ginger and anniſeeds; and, with right management, it may thus be made very ſerviceable in ſome ſtubborn complaints.

DIVISION II. FOREIGN SPECIES.

1. Syrian Scammony.

Convolvulus foliis ſagittatis pedunculis biflоris.

The root is very long, large, and thick, and furniſhed with many fibres.

The ſtalks are numerous and weak, like thoſe of our *common great bindweed*: they climb upon buſhes in the ſame manner, and run to eight feet in length.

The leaves ſtand irregularly, and have long footſtalks: they are large, oblong, and of the arrowhead ſhape; they are ſharp at the point, and as it were cut off with a nick at the two ends behind the ſtalk.

The flowers are large, hollow, undivided, and of a beautiful purple: they ſtand two upon each footſtalk; but only one of them blows at a time.

The ſeed-veſſel is ſingle, and roundiſh, the ſeeds large and black.

It is a native of Syria, and flowers in June.

J. Bauhine calls it *Scammonea Syriaca flore majore convolvuli*. Others, *Scammonea Syriaca*.

The drug known by the name of *ſcammony* at the druggiſts, is the hardened juice of the root of this plant: it is a ſtrong cathartick. We have ſeen that the roots of moſt of the *bindweeds* are purging, and this poſſeſſes that quality in the ſtrongeſt degree of all. The juice which we know by the name of *ſcammony*, though an excellent, is a rough medicine, and is never to be given without correctives.

2. Cretick Scammony.

Convolvulus radice longiſſima.

The root is ſlender, brown, and of a vaſt length.

The ſtalks are numerous, ſlender, weak, and three or four feet high.

The leaves ſtand in pairs; and are large, and of a beautiful green: they have long, ſlender footſtalks, and are heart-faſhioned at the baſe, narrow in proportion to their length, aud pointed at the ends.

The flowers are large, and of a beautiful purple: they ſtand ſingly at the tops of the branches, and are irregularly dented at the edges.

The ſeed-veſſel is ſhort and thick, and the ſeeds are black.

It is a native of the iſland of Crete, and flowers in July.

Alpinus calls it *Scammonea macrorhizos*. Others, *Scammonea Cretica*.

The root abounds with a ſharp juice, of the ſame nature with that of the *Syrian ſcammony*. It is prepared in the ſame manner, by drying, and uſed for the ſame purpoſes; but it is milder than the other.

3. Silver Bindweed.

Convolvulus althæa foliis argenteus.

The root is long, ſlender, and ſpreading.

The ſtalks are numerous, and weak; they trail upon the ground, and are of a pale green colour, hairy, and tough.

The leaves ſtand irregularly. They have long footſtalks, which are ſo weak that they often droop: they are of a beautiful ſhape and colour: they are oblong, heart-faſhioned at the baſe, and pointed at the end; but toward the baſe they are alſo deeply indented or divided in the palmated manner; and they are notched all the way along the edges.

The flowers uſually grow two on a footſtalk, ſometimes ſingly. Each has its own ſeparate pedicle; and they are large, and of a beautiful red.

The ſeed-veſſel is ſhort and thick.

The

The whole plant is of a fine whitiſh ſilvery hue, and when broken does not afford a milky juice, as moſt *bindweeds* do.

It is a native of Italy, and flowers in June.

C. Bauhine calls it *Convolvulus argenteus folio althææ.* J. Bauhine, *Convolvulus peregrinus pulcher folio Betonicæ.*

4. Little blue Bindweed.

Convolvulus cæruleus minor.

The root is long, ſlender, brown, and hung with many fibres.

The ſtalks are weak, round, hairy, of a pale green colour, and a foot high.

The leaves ſtand irregularly, and in a conſiderable number: they have no footſtalks: they are of a pale green, long, narrow, and pointed at the ends: the edges are not at all dented, and they are but a little hairy.

The flowers ſtand ſingly on long, ſlender footſtalks, riſing from the boſoms of the leaves: they are large, and of a beautiful blue.

The ſeed-veſſel is ſhort and thick.

It is a native of Africa and of ſome of the warmer parts of Europe, and flowers in July.

C. Bauhine calls it *Convolvulus peregrinus cæruleus folio oblongo.* Others, *Convolvulus cæruleus minor.*

5. Small-leaved Bindweed.

Convolvulus ramoſus folio parvo.

The root is ſmall, fibrous, and brown.

The ſtalks are numerous, round, of a pale green, and tolerably firm: they divide into many branches; and frequently ſtand upright. They are ſix or eight inches high.

The leaves are ſmall, oblong, and rounded at the ends. They ſometimes ſtand in pairs, but oftener ſingly.

The branches riſe from the boſoms of theſe, and are long, ſlender, and often divided into others. The leaves on theſe are very ſmall and numerous; and they ſtand altogether irregularly.

The flowers are large, and of a bright red: they grow towards the tops of the branches, and have very ſhort footſtalks.

The ſeed-veſſel is ſhort and thick.

It is a native of Italy, and flowers in June.

Moriſon calls it *Convolvulus ramoſus minor.* Pona, *Helxine ciſſampelos ramoſa Cretica*; for it is alſo a native of that Iſland.

6. Many-leaved Bindweed.

Convolvulus foliis numeroſis anguſtis.

The root is long, woody, brown, and furniſhed with many fibres. The leaves that riſe from it are very narrow, longiſh, pointed at the ends, and of a pale green: they ſtand on long footſtalks, and fade when the ſtalks riſe.

Theſe are numerous, ſlender, tough, of a pale green, ſix or ſeven inches long, and conſiderably branched.

The leaves are numerous, and ſtand thick: they are narrow, pale, undivided at the edges, pointed at the ends, and have ſcarce any footſtalks.

The flowers are numerous, moderately large, of a beautiful pale red; and they generally grow two together. They are divided at the rim into five, pointed ſegments.

The ſeed-veſſel is ſmall.

It is a native of Italy, and flowers in June.

C. Bauhine calls it *Convolvulus linariæ folio.* Others, *Convolvulus ſpicæ foliis.*

7. Oak-leaved Bindweed.

Convolvulus quercus folio.

The root is ſlender, fibrous, and brown.

The firſt leaves riſe in a thick tuft: they are of a deep green colour, of a fleſhy ſubſtance, and ſtand on long footſtalks: they have ſome rude reſemblance of oak leaves in miniature, only they are leſs indented toward the point, and blunter at the ends.

The ſtalks are numerous, tough, round, rediſh, and two foot high: they ſtand more erect than moſt of the other *bindweeds*, but not perfectly ſo.

The leaves ſtand alternately: they reſemble thoſe at the root, but they are ſmaller, and not ſo fleſhy.

The flowers grow ſingly from the boſoms of the leaves, and have long, ſlender footſtalks: they are large, undivided at the edge, and of a duſky purpliſh colour.

The ſeed-veſſel is large, and full of dark coloured ſeeds.

It is a native of the ſea-coaſts of Italy, but not common.

Imperatus calls it *Soldanellæ maritimæ congener.*

8. Cretick Bindweed, called Dorycnium.

Convolvulus multiflorus ſericeus.

The root is long, thick, and has but few fibres.

The firſt leaves are long, narrow, undivided, and have no footſtalks: they are of a ſilvery whiteneſs, and ſoft to the touch.

The ſtalks are numerous, round, firm, and woody: they do not lie upon the ground, as in moſt of the others, but ſtand erect.

The leaves on them are narrow, long, and blunt at the end, and have the ſame ſilky aſpect with thoſe from the root: they are numerous, and ſtand irregularly, with young tufts frequently in their boſoms.

The flowers ſtand at the tops of the ſtalks, ſix or eight together, and they are large, and of a beautiful red, though ſometimes white.

The ſeed-veſſel is ſhort and thick.

It is a native of the Greek iſlands, and flowers in July.

Moriſon calls it *Convolvulus major rectus Creticus argenteus.* Others, *Dorycnium*, and *Cneorum.* C. Bauhine, *Cneorum album folio olæ argenteo molli.*

Linnæus ſuppoſes this, and the laſt but one, varieties of the ſame ſpecies; but they are truly diſtinct.

9. Ivy-leaved Bindweed.

Convolvulus foliis trilobis.

The root is ſmall, fibrous, and brown.

The firſt leaves are large, numerous, and form a thick tuft. They are placed on long footſtalks, and

and are formed as it were of three ſmaller joined together.

The ſtalks are numerous, ſlender, and branched. They are too weak to ſupport themſelves without help, but will climb to the height of ten feet.

The leaves ſtand irregularly, and are of the ſame form with thoſe from the root: they have three points, or are formed of three parts, and are of a pale green.

The flowers ſtand on long footſtalks, and are large, and of a beautiful blue; they are divided into five pointed ſegments at the edge.

The ſeed-veſſel is large, and the ſeeds are blackiſh.

It is a native of the Eaſt, and flowers in July and Auguſt. The flowers open principally in an evening, and fade when the ſun has power.

C. Bauhine calls it *Convolvulus cæruleus hederæceo angulojo folio.*

10. Feather-leaved Bindweed.

Convolvulus foliis pennatis.

The root is ſmall, divided into two or three parts, and furniſhed with long, ſpreading fibres.

The firſt leaves are numerous, and extreamly beautiful: they ſtand on long, purpliſh footſtalks, and are large, of a fine deep green, and compoſed of ten or twelve pairs of long ſegments, extreamly narrow, and placed nearly oppoſite to one another, with an odd one, uſually forked, at the end; together with theſe, there riſe a couple of broad, plain, hard leaves from the ſeed, which remain a long time; and ſometimes the ſtalk riſes immediately between theſe, without any other radical leaves.

The ſtalks are ſlender, tough, and weak: they climb on any thing to the height of ſeveral feet: the leaves ſtand irregularly on them, and have long, tender footſtalks: they in all things reſemble thoſe from the root, and are extreamly beautiful.

The flowers are large, and of a very bright red: they grow in little cluſters, and are divided into five ſegments at the edge: they have ſomething of the aſpect of the flowers of jeſſamy, and have thence given, among ſome writers, a name to the plant.

The ſeeds are contained in ſhort capſules, one after every flower.

It is a native of the Eaſt Indies, and of ſome parts of South America.

Columna calls it *Convolvulus pennatus exoticus rarior.* C. Bauhine, *Jaſminum millifolii folio.* Many call it *quamoclit*, an Indian name. Linnæus ſeparates this and ſome others from the reſt of the *bindweeds*, under the name of *Ipomæa*, but with ſo little foundation in nature, that when he has given the characters, he adds, "theſe plants are really ſpecies of *Convolvulus*." Why therefore did he permit the other nominal genus to remain? He has alſo ſeparated theſe, under the name of *ipomæa*, in his *Species Plantarum*, his laſt publiſhed work.

GENUS III.

GENTIAN.

GENTIANA.

THE flower conſiſts of a ſingle petal, which is of a tubular ſhape, and divided into ſegments at the edge: it ſtands in a cup, formed of a ſingle leaf divided into five parts: the ſeeds are contained in a ſingle capſule, which is large, and lightly ſplit at the top.

Linnæus places this among his *pentandria digynia*, the threads in the flower being five; and the rudiment of the fruit, though ſingle in itſelf, having two ſtigmata. If this author had regarded the body of the rudiment, rather than theſe leſſer parts, it would have brought his method nearer to nature. This would then have been placed among the *monogynia*; the rudiment being really ſingle, and giving the firſt notice of the ſingle capſule ſucceeding each flower, to which the claſs owes its origin.

This author includes ſmall centaury in this genus: but they differ ſufficiently in many reſpects, though the flowers are nearly the ſame.

DIVISION I. BRITISH SPECIES.

1. Marſh-gentian.

Gentiana paluſtris anguſtifolia.

The root conſiſts of ſeveral thick, long fibres, with other ſmaller ones growing to them. The large fibres are yellow, tough, and of a bitter taſte; ſometimes they grow to a ſmall head, ſometimes they are only joined at the top to one another.

The ſtalk is ſlender, firm, upright, but not altogether ſtrait, frequently bowing from joint to joint.

The leaves are long, narrow, and of a duſky green: they grow two at a joint oppoſite to one another, and have no footſtalks: they are undivided at the edge, and ſharp at the point.

The flowers ſtand at the tops of the ſtalks, and are very large and beautiful: they are long, hollow, irregularly divided into five ſegments at the edge, and of a very deep blue.

The ſeed-veſſel is long and ſlender, and the ſeeds are ſmall.

It is found in many parts of England on boggy ground, and flowers in Auguſt.

C. Bauhine calls it *Gentiana paluſtris anguſtifolia.* Others call it *Pneumonanthe.* We, in Engliſh, *Marſh-gentian*, or *Calathian violet.* This laſt is an antiquated and improper name.

2. Woolly-

2. Woolly-flowered Gentian.

Gentiana flore lanuginoſo.

The root is ſmall, woody, and divided into ſeveral parts: it is of a browniſh colour, and bitter taſte: there are long fibres produced from it about the head, which creep under the ſurface, and ſpread every way.

The ſtalk is ſlender, round, ſtriated, erect, and five or ſix inches high, ſometimes more, ſometimes much leſs; for the plant varies greatly in ſize.

The leaves are long and narrow, but not altogether ſo narrow as thoſe of the preceding. They are of a freſh green, and ſtand in pairs without *footſtalks*.

The flowers are large, and of a deep blue. They are divided into four ſegments at the edge, and there is a downyneſs of a purpliſh colour within.

The ſeed-veſſel is long, ſlender, and pointed; and the ſeeds are very ſmall.

It is found in barren, chalky ſoils, but not common. It flowers in September.

C. Bauhine calls it *Gentiana pratenſis flore lanuginoſo*. With us it does not grow in meadows, as that name ſeems to expreſs. When this plant grows larger from a good ſoil, the leaves acquire more breadth, and in this form it is deſcribed by ſome authors as a different ſpecies, under the name of *Gentianella fugax autumnalis elalior centaurii minoris foliis*; but this is merely a variety from more nouriſhment.

3. Little Spring Gentian.

Gentianella pumila præcox.

The root is ſmall, long, brown, and divided, and has a bitter taſte.

The ſtalks are numerous, and of a browniſh colour, rigid, firm, upright, but little branched, and from three to eight or ten inches in height, according to the degree of nouriſhment they find.

The leaves ſtand in pairs pretty near to one another: they are oblong, broad, pointed at the ends, of a duſky green colour, and have no footſtalks.

The flowers ſtand at the tops of the ſtalks, ſometimes ſingly, ſometimes two or three together: they are large, and blue, and are divided into five ſegments at the edge.

The ſeed-veſſel is thick, and oblong, and the ſeeds ſmall and brown.

It is common in hilly paſtures, and flowers in April.

This, like the former, varying in ſize, has been divided, from that accident alone, into ſeveral imaginary ſpecies.

Columna calls it *Gentianella purpurea minima*. Ray, *Gentianella fugax verna ſive præcox*.

Theſe three are the only ſpecies of *gentian* we have native in Britain. They and the next to be deſcribed are called by many *gentianellæ*, from their ſmallneſs in compariſon of the *gentian* uſed in medicine.

They are all good ſtomachicks, but inferior to that great kind. The country people make a very good bitter tincture from any of theſe, and orange peel ſteeped in white wine.

DIVISION II. FOREIGN SPECIES.

1. Great-flowered Gentian.

Gentiana latifolia magno flore.

The root is ſmall, yellowiſh, divided into many parts, and furniſhed with fibres: it is of a bitter taſte, and firm texture.

The leaves are broad and ſhort: a tuft of them riſe without footſtalks from the root early in ſpring, and ſoon after, the ſtalks appear.

Theſe are round, firm, browniſh, and five or ſix inches high.

They have numerous leaves ſtanding in pairs, of the ſame ſhape, colour, and ſubſtance with thoſe from the root: they are nervous, and of a browniſh green.

The flower ſtands at the tops of the ſtalk, and is very large, and of a beautiful ſky blue; it is tubular, and divided into five ſegments at the edge, with white lines down their ſides.

The ſeed-veſſel is long, and large, and ſplits into two at the top. The ſeeds are ſmall.

It is frequent in Germany, and flowers in April.

C. Bauhine calls it *Gentiana alpina verna major*. Others call it *Hippion*. We, *Great-flowered gentian*.

2. Great Gentian.

Getiana major lutea:

The root is long and large, divided into ſeveral parts, and covered with a rough ſkin. It is brown on the outſide, yellow within, of a firm ſubſtance, and very bitter taſte.

The leaves that firſt riſe from it are large, oblong, broadeſt in the middle, pointed at the ends, and without footſtalks: they are of a deep green colour, and firm ſubſtance; and have five large ribs running lengthwiſe of them, and no others of any note. This is a particular mark, as it makes them reſemble the leaves of plantain or white hellebore; the generality of plants having only one long and large rib in the leaf, and the others running obliquely from it.

The ſtalk riſes in the midſt of this tuft of leaves, and is round, thick, firm, upright, and three or four feet high.

The leaves are numerous, and ſtand in pairs in a line over one another; they are of the ſame ſhape and ſubſtance with thoſe at the root, and having no footſtalks, they ſurround the ſtalk at the baſe.

The flowers are very numerous, and yellow. They ſtand in great tufts ſurrounding the ſtalk, with a pair of leaves under every tuft: they are

placed in a ſmall cup, and are divided into five long and narrow ſegments.

The ſeed-veſſels are long, ſwelled at the bottom, and ſplit a little at the top.

It is a native of Germany and other parts of the north of Europe; and flowers in July.

C. Bauhine calls it *Gentiana major lutea*. Camerarius and others, ſimply, *Gentiana*; and ſome, from the ſegments of the flower being ſpread like the rays of a ſtar, *Aſterias*.

This is the ſpecies whoſe root is the true and proper *gentian* kept by the druggiſts.

It is an excellent ſtomachick, and is the principal ingredient in bitter tinctures. It ſtrengthens the ſtomach, promotes an appetite, and aſſiſts digeſtion. This root, orange-peel, and cardamom ſeed infuſed in wine or water, either way, make an excellent family bitter.

This is its common uſe; but beſides this, it ſtands recommended againſt malignant fevers, and diſorders riſing from obſtructions in the viſcera: and it is alſo good againſt worms, and in intermittent fevers.

The beſt tincture of it is that in white wine.

3. Croſs-leaved Gentian.

Gentiana foliis cruciatim diſpoſitis.

The root is long, thick, and divided into ſeveral parts.

The firſt leaves are long and broad; they riſe in large tufts, and have no footſtalks.

The ſtalks are numerous, round, firm, upright, and eight inches high.

The leaves are placed in pairs without footſtalks, and ſurround the ſtalk at their baſe: they are broad, nervous, of a deep green, and ſharp-pointed; and the pairs uſually are placed croſswiſe of one another.

The flowers ſtand in a thick cluſter at the tops of the ſtalks, and are ſmall and blue: they are tubular, and divided into four ſhort ſegments.

The ſeed-veſſel is oblong, ſlender, and ſplit at the top, and the ſeeds are ſmall.

It is common in the northern parts of Europe, and flowers in July.

C. Bauhine calls it *Gentiana cruciata*. Camerarius, *Gentiana minor*.

The root has the ſame taſte, and probably the ſame virtues, with the *common gentian*. It is greatly recommended in peſtilential fevers.

4. Great blue Gentian.

Gentiana major flore cæruleo.

The root is long, large, and divided into ſeveral parts.

The leaves that riſe from it are long and broad: they have no footſtalks: they are of a deep green colour, and firm ſubſtance, undivided at the edges, and ſharp-pointed.

The ſtalks riſe in the centre of this tuft, and are firm, upright, and two feet high.

The leaves are long and large; they reſemble thoſe from the root, but are of a paler green and of a ſofter ſubſtance: they have no footſtalks, and they are ribbed lengthwiſe, like thoſe of the *great gentian*: they ſtand in pairs, and encloſe the ſtalk at the bottom.

The flowers grow from the boſoms of the leaves, from the middle to the top, and not unfrequently from the root up to the top, generally two upon each footſtalk: they are large, and of a beautiful blue, tubular, and divided into five parts at the edge.

The ſeed-veſſel is long and ſlender, and contains a great quantity of ſmall ſeeds.

It is a native of Germany, and flowers in June.

C. Bauhine calls it *Gentiana aſclepiadis folio*.

GENUS IV.

CENTAURY.

CENTAURIUM.

THE flower is ſmall, and conſiſts of a ſingle petal, which is of a tubular form, and is divided into ſeveral ſegments at the edge. The ſeed-veſſel is ſlender, oblong, and ſingle. The ſtalks and leaves are tender.

Linnæus places this among his *pentandria digynia*, making it a ſpecies of gentian, not allowing it to be a diſtinct genus. But, though it agrees with gentian in the ſtructure of the flower, it differs ſufficiently in its whole form and ſubſtance; the ſtalks of the gentians being hard and rigid, and their leaves tough and nervous; whereas thoſe of the *centaury* are tender, as in the generality of other plants.

Many authors call this genus *centaurium minus*, *ſmall centaury*, having given the name of *great centaury* to a plant altogether unlike it, and of a diſtinct claſs.

DIVISION I. BRITISH SPECIES.

1. Little Centaury.

Centaurium minus vulgare.

The root is ſmall, long, divided into many parts, and furniſhed with numerous fibres.

The firſt leaves riſe in a tuft: they are oblong, broad, ſmooth, of a pale green colour, and have no footſtalks.

The ſtalks riſe among theſe, and are numerous, ſlender, upright, eight inches high, and of a yellowiſh colour.

The leaves ſtand in pairs on them, and have no


Winter Wolfsbane
Leaved Piony
Female Piony
Spanish Piony
Yellow Indian Mallow
White Indian Mallow
Yellow Ninetown
Great Periwinkle
Small Periwinkle
Small Bearsfoot
Wall Pennywort
Common Henbane
Great Bindweed
White Henbane
Golden Henbane
Little Henbane
Little Bindweed

no footſtalks: they are like thoſe from the root, but ſhorter, of a freſher green, and more pointed: they are undivided at the edges, and tend upwards.

Toward the top the ſtalk divides into ſeveral branches, commonly, but not conſtantly, by two and two: theſe have ſmaller and narrower leaves on them, and at their tops tufts of flowers; and all joining, there is formed by the whole, a very large cluſter.

The flowers are ſmall, but of a bright and beautiful red: they are ſlender, hollow, and ſpread toward the rim, where they are divided into five ſegments.

The ſeed-veſſel is ſimple, ſmall and long, and the ſeeds are numerous and very minute.

It is common in dry paſtures, and flowers in July.

C. Bauhine calls it *Centaurium minus.* J. Bauhine, *Centaurium minus flore purpureo et albo*; the flowers being ſometimes white; but this is an uncommon variety.

It is an excellent ſtomachick: its taſte is bitter, but not unpleaſant, and it promotes an appetite, ſtrengthens the ſtomach, and aſſiſts digeſtion.

It may be called the *Engliſh gentian.*

It is excellent in obſtructions of the viſcera, in the jaundice, and againſt worms. The beſt way of giving it is in infuſion, to which may be added lemon-peel and cardamoms.

2. Little yellow Marſh-centaury.

Centaurium paluſtre luteum minimum.

The root is long, ſlender, and divided into many parts.

The firſt leaves are ſhort, and obtuſe at the end: they have no footſtalks, and they quickly grow yellow and fade.

The ſtalks are numerous, ſlender, and very much branched: they are four or five inches high, and full of leaves: theſe ſtand in pairs, and are ſmall, obtuſe, and undivided at the edges.

The flowers ſtand at the tops of the ſtalks and branches, and are little, and of a duſky yellow.

The ſeed-veſſels are long, ſlender, and full of very ſmall ſeeds.

It is found on boggy grounds in ſome parts of England, but is not common. It flowers in June.

Ray calls it *Centaurium paluſtre luteum minimum noſtras.* It has the ſame bitter taſte with the other.

3. Perfoliate yellow Centaury.

Centaurium luteum perfoliatum.

The root is ſmall, oblong, and divided into ſeveral parts.

The ſtalk is round, ſlender, upright, and a foot and half high; it is ſcarce at all branched, and of a pale yelloviſh green.

The leaves are very ſingular; they ſeem to be compoſed each of a pair of broad and ſhort ones, perfectly jointed at their baſes; ſo that they form one oblong, hollow leaf, of the ſhape of a boat, through the centre of which the main ſtalk paſſes. No plant is ſo perfectly perfoliate. Theſe ſingular leaves are tender, of a deep green, and ſmall, obtuſe at the points, and not at all indented at the edges: they are ſmaller toward the lower part of the ſtalk, largeſt ſomewhat above the middle, and thence ſmaller again toward the top.

The flowers ſtand in a looſe cluſter at the top of the ſtalk, each on a ſlender pedicle: they are of a beautiful yellow: they have a tubular bottom, and are divided at the rim into eight ſegments, ſo deeply that at firſt ſight they ſeem to conſiſt of ſo many petals.

The ſeed-veſſel is oblong and ſlender, and the ſeed ſmall.

It grows in dry, barren, chalky places, but not very common. It varies extreamly in ſize; whence ſome have divided it into a larger and ſmaller ſpecies. It flowers in July.

C. Bauhine calls it *Centaurium luteum perfoliatum.*

DIVISION II. FOREIGN SPECIES.

Alternate-leaved Centaury.

Centaurium foliis alternis.

This differs from all the others in an obvious and ſtriking particular: their leaves grow in pairs; thoſe of this ſpecies ſingly.

Its root is long, thick, yelloviſh, divided into ſeveral parts, and furniſhed with many fibres.

The leaves that riſe from it are oblong, broad, even at the edges, ſharp at the points, and have no footſtalks: they riſe in a little tuft, and are of a pale green; and they ſoon grow pale, and wither when the ſtalks riſe.

The ſtalks are numerous, round, upright, very much branched, and of a pale yelloviſh colour: they divide generally in a forked manner, or, as botaniſts call it, dichotomouſly, but not univerſally.

The leaves ſtand alternately, and are of a pale green: they are not very numerous, and they vary greatly in ſhape. Thoſe toward the bottom of the ſtalk are like ſuch as riſe from the root; thoſe higher up are longer and narrower; and there are tufts alſo of very ſmall and narrow ones in their boſoms, and toward the tops of the branches.

The flowers are ſmall, and white: they do not ſtand in cluſters at the tops of the ſtalks, as in the other ſpecies, but all the way up in a kind of irregular ſpikes.

Its ſeed-veſſels are ſmall and cylindrical, and the ſeeds very ſmall and numerous.

It is a native of France and Italy, and flowers in July.

C. Bauhine calls it *Centaurium minus ſpicatum album.* Others, *Centaurium minus album.*

GENUS V.

LOOSE STRIFE.

LYSIMACHIA.

THE flower conſiſts of a ſingle petal, which is divided into five ſegments at the edge: the ſeeds are contained in a ſingle capſule, which is round and large: the plant is erect and tall.

Linnæus places this among the *pentandria monogynia*; there being five threads in the centre of the flower, and the rudiment of the capſule being ſingle.

It is a genus extremely diſtinct, and plainly characteriſed. We have been accuſtomed to call this, and ſeveral other very different genera, by the common name of *willow herb*, the leaves of ſome of them reſembling thoſe of the willow. Thoſe of this genus are much leſs like them than the leaves of ſome of the others; wherefore we have changed that name for another *looſe ſtrife*, by which it is alſo commonly known; retaining that of *willow herb*, for the other genus, which has more right to that appellation.

DIVISION I. BRITISH SPECIES.

1. Common yellow Looſe Strife.

Lyſimachia lutea vulgaris.

The roots are numerous, long, ſlender, and creeping.

The firſt leaves are large, oblong, broad, even at the edges, and pointed at the ends: they are of a beautiful green; they riſe in a thick tuft, and have no footſtalks.

The ſtalk is firm, upright, hard, and four feet high, and toward the top it ſends out many branches.

The leaves grow two, three, or more, at a joint without footſtalks: they are large, broadeſt at the middle, and jointed at the end, and of a beautiful green.

The flowers are very numerous, conſiderably large, and of a beautiful gold yellow: they ſeem compoſed of five petals, and have pointed buttons on the threads.

The ſeed-veſſel is round and large.

This is ſo beautiful a plant in its erect ſtature, regular growth, and elegant flowers, that it is very worthy to be taken into our gardens. It is wild by water-ſides not unfrequently, and flowers from May to Auguſt.

C. Bauhine calls it *Lyſimachia lutea major.* Others, *Lyſimachia lutea vulgaris.*

2. Globoſe Looſe Strife.

Lyſimachia flore globoſo.

The root is long, ſlender, jointed, and furniſhed with abundance of fibres.

The firſt leaves riſe only two or three together from different parts of the root: they are long, narrow, and of a deep green; and they have no footſtalks: they are undivided at the edges, and ſharp at the point.

The ſtalk is firm, upright, not branched, and a foot and a half high.

The leaves ſtand in pairs: they are long, ſomewhat broad, undivided at the edges, and have no footſtalks: they are ſmalleſt toward the bottom and top of the plant, and largeſt in the middle.

The flowers ſtand in roundiſh heads: theſe are ſupported by long, ſlender footſtalks, and riſe from the boſoms of the leaves, principally about the middle of the plant; they are ſmall, and yellow.

The ſeed-veſſel is ſingle, roundiſh, and ſmall.

It is found in wet places, but not common.

C. Bauhine calls it *Lyſimachia bifolia flore luteo globoſo.* Others, *Lyſimachia lutea globoſa.*

3. Hairy ſhort-leaved Looſe Strife.

Lyſimachia foliis brevibus hirſutis.

The root is long, ſlender, creeping, and full of fibres.

The ſtalks are numerous, and three feet high: they are firm, upright, not much branched, and of a pale yellowiſh colour.

The leaves ſtand in an irregular manner as in the common kind, two, three, or four at a joint: they are ſhort, blunt, of a pale green, and hairy.

The flowers are large, and of a beautiful yellow: they ſtand in cluſters at the tops of the branches.

The ſeed-veſſels are large and round.

It is not uncommon in damp paſtures, and flowers in June.

Ray calls it *Lyſimachia lutea foliis breviorjbus obtuſis floribus in ſummitate congeſtis.*

DIVISION II. FOREIGN SPECIES.

1. Red-flowered Looſe Strife.

Lyſimachia flore rubente.

The root is compoſed of many thick, long, and whitiſh fibres.

The firſt leaves are long, narrow, and of a bright green, and have no footſtalks: they riſe in large tufts, but fade and diſappear when the ſtalks come up.

The ſtalks are numerous, round, firm, erect, and two feet and a half high.

The leaves are long and narrow: they ſtand in pairs, and have no footſtalks.

The flowers ſtand in long ſpikes at the tops of the

the ſtalks and their branches: they are large, and placed diſtinct; they conſiſt each of a ſingle petal, divided into five ſegments in the manner of the common yellow kind, and are of a beautiful red.

The ſeed-veſſel is ſmall and round.

It is a native of Italy, and flowers in July.

C. Bauhine calls it *Ephenerum Mathioli.*

2. Spotted yellow Looſe Strife.

Lyſimachia flava pedunculis aniſoris.

The root is long, ſlender, jointed, and creeping.

The ſtalk is round, firm, upright, ſmooth, and two feet high.

The leaves are long and narrow; their broadeſt part is in the middle: they are ſharp pointed, and undivided at the edges, and have no footſtalks. They ſtand irregularly; on ſome parts of the ſtalk ſingly, and on others four at a joint. Their colour is a deep green, and they are commonly ſpotted on the back.

The flowers are large, beautiful, and yellow: they ſtand on ſhort footſtalks riſing from the boſoms of the leaves, one flower on each.

The ſeed-veſſel is roundiſh, but ſomewhat oblong.

It is frequent in Flanders, and in ſome parts of Italy. It flowers in June.

C. Bauhine calls it *Lyſimachia lutea minor foliis nigris punctis notatis.* Cluſius, *Lyſimachia lutea ſecunda.*

Looſe ſtrife has the credit of being an excellent vulnerary; but it is not regarded in the preſent practice.

GENUS VI.

MONEYWORT.

NUMMULARIA.

THE flower conſiſts of a ſingle petal, and is divided into five ſegments: the ſeed-veſſel is large and round, and the ſtalks are weak and trailing.

Linnæus places this among his *pentandria monogynia*, the threads in each flower being five in number, and the rudiment of the capſule ſingle. But he does not allow this a diſtinct genus; he makes it the ſame with lyſimachia, and calls its ſpecies by that name.

We are averſe to aboliſhing received and eſtabliſhed names, becauſe we would render the ſtudy of botany familiar, not load it with difficulties: therefore we have ſeparated theſe plants, retained the name *nummularia*, and eſtabliſhed it as a genus. It is true, that the flowers of this plant, and thoſe of lyſimachia are of a like ſtructure; but all the ſpecies of lyſimachia are erect and tall, and all thoſe of *nummularia* weak, low, and trailing. This is an obvious, and, for all uſeful purpoſes, a ſufficient diſtinction.

DIVISION I. BRITISH SPECIES.

1. Yellow Moneywort.

Nummularia flore flavo.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalks are numerous, ſlender, round, weak, and trailing: they naturally lie upon the ground, and ſpread every way; and they are ſimple, and not branched.

The leaves are very beautiful in ſhape and diſpoſition: they ſtand two at a joint, and grow flatwiſe, and the diſtances between them are ſmall; ſo that as the plant lies ſpread on the ground, they make a very beautiful appearance: they are nearly round in ſhape, and of a fine freſh green colour. The plant had its name from their reſembling pieces of money.

The flowers are large, and of a fine gold yellow: they ſtand on ſingle footſtalks riſing from the boſoms of the leaves almoſt the whole length of the plant.

The ſeed-veſſels are round and large.

It is common in meadows, and flowers in June.

C. Bauhine calls it *Nummularia major lutea.* Others, *Nummularia vulgaris.* We, *Moneywort*, and *Pennywort*, or *Herb twopence.*

2. Purple Moneywort.

Nummularia flore purpuraſcente.

This is a ſmall, but very pretty plant.

The root is long, and furniſhed with numerous tough fibres.

The ſtalks are numerous, ſlender, weak, crooked, and ſpreading: they lie upon the ſurface, or riſe very little, and very irregularly from it.

The leaves are ſmall, roundiſh, but a little pointed, of a freſh green, and placed in pairs on ſhort footſtalks.

The flowers are moderately large, and of a beautiful red: they ſtand ſingly on long and very ſlender footſtalks riſing from the boſoms of the leaves, and are divided into five ſegments, ſo deeply that they ſeem compoſed of ſo many petals.

The ſeed-veſſel is ſmall and oval; the ſeeds are numerous, and very ſmall.

It is not uncommon in boggy places, and flowers in June.

C. Bauhine calls it *Nummularia minor flore purpuraſcente.* J. Bauhine, *Nummularia rubra.*

3. Moneywort with pointed leaves.

Nummularia foliis acutis.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalks are numerous, very ſlender, weak, and eight or ten inches long.

The leaves ſtand in pairs, and have no footſtalks: they are broad and ſhort, and reſemble very much the leaves of the common kind in colour as well as diſpoſition; but that inſtead of terminating bluntly as in that, they here end in a ſharp point.

The flowers ſtand ſingly on long, ſlender footſtalks, which riſe from the boſoms of the leaves, and they are of a beautiful yellow.

The ſeed-veſſels are ſmall and round.

It is frequent in woods, and flowers in July.

C. Bauhine calls it *Anagallis lutea nemorum.* J. Bauhine, *Anagallis lutea nummulariæ ſimilis.* W. *Yellow wood pimpernell*; but J. Bauhine's name comes neareſt to truth, for it is in reality a kind of *moneywort.*

DIVISION II. FOREIGN SPECIES.

1. Stellate-leaved Moneywort.

Nummularia foliis ſtellatis.

The root is ſmall, ſlender, long, and full of fibres.

The ſtalks are numerous, weak, ſlender, and ſeven or eight inches long.

The leaves are broad, and ſhort: they ſtand four together: they have ſhort footſtalks, and are ſharp-pointed.

From the boſom of every leaf riſes the pedicle of a flower, therefore there are four of them alſo at every joint: they are of a beautiful yellow, and are deeply divided into five ſegments.

The ſeed-veſſel is ſmall and oval.

It is a native of Virginia, principally about the coaſt; and flowers in July.

Petiver calls it *Anagallis marina lutea foliis latis ſtellatis.*

Theſe ſeveral ſpecies, as they reſemble the *common moneywort* in form, are of the ſame nature and qualities: it is a plant of very conſiderable virtues, which looſe ſtrife does not poſſeſs, at leaſt not in an equal degree, and is therefore very neceſſarily ſeparated and preſerved under its proper and peculiar name.

The *common moneywort* is cooling and aſtringent; it is excellent againſt ſpitting of blood, and in dyſenteries: for theſe purpoſes the beſt way of giving it is dried and powdered.

The juice of it is a known remedy for overflowings of the menſes, and the roots powdered are good in diarrhœas.

GENUS VII.

ROUND PIMPERNELL.

SAMOLUS.

THE flower conſiſts of a ſingle hollow petal, widening to the mouth, and divided into five obtuſe ſegments: the ſeed-veſſel is of an oval figure, and the cup remains with it.

Linnæus places this among the *pentandria monogynia*; the threads being five in the centre of each flower, and the rudiment of the fruit ſingle.

Of this genus there is but one known ſpecies.

Round-leaved Pimpernell.

Samolus.

The root is a thick tuft of long, ſlender fibres.

The leaves that riſe from it are numerous, oblong, and without footſtalks: they ſtand in a regular tuft, and are of a beautiful green. They are narrow, and lengthened in manner of a ſtalk toward the baſe, but at the top oval, undivided at the edges, and obtuſe.

The ſtalk is round, firm, upright, and a foot high.

The leaves ſtand irregularly on it, and are of the ſame figure with thoſe from the root, except that they are not ſo lengthened at the baſe: they are broad, obtuſe, and rounded at the end.

The flowers ſtand at the tops of the ſtalk and branches, and are ſmall and white.

The ſeed-veſſel is ſmall, and the ſeeds numerous and minute.

It is not uncommon in wet places, and flowers in July.

C. Bauhine calls it *Anagallis aquatica folio rotundo non crenato.* J. Bauhine, *Samolus valerandi.*

Its juice is an excellent antiſcorbutick, taken with juice of Seville orange, and a moderate quantity of white wine.

GENUS

GENUS VIII.

PIMPERNELL.

ANAGALLIS.

THE flower conſiſts of a ſingle petal, divided ſo deeply into five ſegments, that there remains no tubular part, and the ſegments adhere to one another only at their baſes: the cup is formed of a ſingle leaf, divided into five hollowed ſegments: the ſeed-veſſel is round, and the ſeeds are numerous and ſmall.

Linnæus places this among his *pentandria monogynia*; the threads being five in every flower, and the rudiment of the fruit ſingle.

DIVISION I. BRITISH SPECIES.

1. Red Pimpernell.

Anagallis flore phœniceo.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalks are numerous, weak, and ſpreading: they are ſix or eight inches long, but lie ſcattered upon the ground, or riſe but very imperfectly.

The leaves are ſhort, broad, and of a fine bright green: they ſtand in pairs, and have no footſtalks: they are broadeſt at the baſe, and narrower all the way to the point, and are undivided at the edges: they ſtand at moderate diſtances from pair to pair, and the plant has a regular and pretty aſpect.

The flowers are ſmall, but very conſpicuous from their colour, which is a bright ſcarlet: they ſtand on long, pale-green footſtalks riſing from the boſoms of the leaves all the way up the ſtalk.

The ſeed-veſſel is large, and the ſeeds are numerous.

It is common in corn-fields, and flowers in May.

C. Bauhine calls it *Anagallis flore phœniceo.* Others calls it *Anagallis mas.* Our common people, *Pimpernell.*

2. Blue Pimpernell.

Anagallis cæruleo flore.

The root is long, divided, and fibrous.

The ſtalks are numerous and firm: they do not lie ſcattered on the ground, as in the preceding ſpecies, but ſtand tolerably upright; and are little branched, and ſix inches high.

The leaves are long, narrow, and of a pale green: they grow two, or as often three, at a joint, and have no footſtalks: they are broadeſt at the baſe, narrower all the way to the point, and not at all indented at the edges.

The flowers are large, and of a beautiful blue: they ſtand ſingly on long footſtalks riſing from the boſoms of the leaves, and are very numerous on the whole length of the ſtalks.

The ſeed-veſſel is large, and the ſeeds are numerous and ſmall.

We have it in our corn-fields, but not common. It flowers in June.

C. Bauhine calls it *Anagallis cæruleo flore.* Others, *Anagallis fœmina*, Female pimpernell.

There are two varieties of the *common red pimpernell*, which are treated by too many writers as diſtinct ſpecies; the one has white flowers, and the other three leaves at a joint, as the blue has, inſtead of two: this is the mere work of chance; the plants all riſe from the ſame ſeeds, and are by no means to be conſidered as a diſtinct ſpecies.

Pimpernell is a celebrated cordial and ſudorifick; and the red-flowered, or common kind has moſt virtue.

An infuſion of the freſh plant is excellent in ſlight feveriſh indiſpoſitions; never, or very rarely, failing to promote perſpiration, and throw off the complaint.

The whole plant dried and powdered, is good againſt the epilepſy. There are well authenticated accounts of this terrible diſeaſe abſolutely cured by it.

A decoction of it is much uſed in ſome places in the firſt ſtages of conſumptions.

DIVISION II. FOREIGN SPECIES.

1. Jagged-leaved Pimpernell.

Anagallis foliis oblongis ſinuatis.

The root is long and brown.

The leaves that firſt grow from it are long and narrow; and they lie ſpread in a round form upon the ground: they are of a duſky green, and deeply ſinuated.

The ſtalks are round, firm, and upright; and their leaves reſemble thoſe of the root, but they are ſhorter, and more deeply indented.

The flowers are large, and of a deep red.

It is a native of Aſia, and flowers in ſpring.

Petiver calls it *Anagallis purpurea burſæ paſtoris foliis minoribus.*

2. Blue Pimpernell, with ſhort leaves.

Anagallis cærulea foliis brevibus.

The root is long, ſlender, divided, and hung with fibres.

The ſtalks are numerous, and tolerably firm.

The leaves ſtand in pairs, and are of a cordated or heart-faſhioned ſhape: they are of a deep green; they have no footſtalks, and they ſurround the ſtalk at their baſe. The ſeveral pairs do not ſtand in the ſame line, but oppoſite; and ſometimes, as in our common kind, there grow three leaves or more at a joint, inſtead of two.

The flowers ſtand on ſlender footſtalks, and are of a beautiful blue.

The ſeed-veſſel is round, and the ſeeds are ſmall.

It is a native of Spain, and flowers in Auguſt.

Tournefort calls it *Anagallis Hiſpanica latifolia maximo flore*. Others, *Cruciata montana cærulea*.

GENUS IX.

PRIMROSE.

PRIMULA.

THE flower conſiſts of a ſingle petal in a long cup; the tube of the petal is of the length of the cup, and its edge is divided into five ſegments, which are obtuſe, and dented in the middle: the ſeed-veſſel is ſingle and long; and the flower ſtands ſingle upon a naked footſtalk.

Linnæus places this among his *pentandria monogynia*, the threads in the flower being five, and the rudiment of the fruit ſingle: but he includes the cowſlip and auricula under this name, making them all one genus.

This is not neceſſary nor convenient. The cowſlip has its particular name and peculiar virtues, and it is ſufficiently diſtinguiſhed by having ſeveral flowers upon a ſtalk, whereas in the *primroſe* there is but one; nor does the auricula want its marks of diſtinction from both.

DIVISION I. BRITISH SPECIES.

Common Primroſe.

Primula vulgaris.

The root is a ſhort, thick head, furniſhed with a great number of long and large fibres.

The leaves riſe in a great tuft; and are large, oblong, and without footſtalks: they are rough, of a deep, but pleaſant green, and not dented at the edges.

The flowers riſe among theſe on ſingle footſtalks: theſe are ſlender, naked, hairy, whitiſh, and each ſuſtains one flower.

This is large, and white, or yellowiſh, deeply divided into five ſegments, which are broadeſt at the end, and indented there in a heart faſhioned manner.

The ſeed-veſſel is longiſh, ſlender, and covered; and the ſeeds are numerous and roundiſh.

It is common in woods and thickets, and flowers in ſpring.

C. Bauhine calls it *Verbaſculum ſylvaticum majus ſingulari flore*.

The roots of the *common primroſe* are uſed as a ſternutatory againſt diſeaſes of the head. The beſt way is to bruiſe them, and preſs out the juice, which is to be ſnuffed up. It occaſions violent ſneezing, and brings away a great deal of water, but without danger.

Dried and powdered, the roots are good in nervous diſorders; but the doſe muſt be ſmall. It is reported to be a cure in the night-mare.

DIVISION II. FOREIGN SPECIES.

Purple Primroſe.

Primula purpurea folio brevi.

The root conſiſts of a ſmall head, and a vaſt quantity of ſhort fibres.

The leaves are numerous, and form a thick tuft: they are ſhort and broad, irregularly and ſlightly ſinuated at the edges, and pointed at the ends.

The ſtalk which ſupports the flower is three inches high, whitiſh, naked, and ſlender.

The flower ſtands at the top, ſingle and large: it has a green huſk, ribbed in five places, and is itſelf divided into five ſegments; theſe are broad, and heart-faſhioned at the ends: the colour is a beautiful purple, except in the centre, where there is a yellow ſtar.

The ſeed-veſſel is long, and the ſeeds are numerous and ſmall.

It is a native of Turky, and flowers in ſpring.

Cornutus calls it *Primula veris Conſtantinopolitana*. Others, *Primula purpurea*.

The Turks call it *Carchichec*: they give the roots dried and powdered in diſorders of the ſtomach, and, as is ſaid, with great ſucceſs.

GENUS X.

COWSLIP.

PARALYSIS.

THE flower conſiſts of a ſingle petal, tubular in the lower part, and at the edge divided into five ſegments, obtuſe, and dented in the middle: the ſeed-veſſel is ſingle and oblong: ſeveral flowers ſtand upon one naked ſtalk.

Linnæus



little Centaury



Alternate leav'd Centaury



Common Yellow Loosestrife



Globate Loosestrife



red flower'd Loosestrife



Perfoliate Yellow Centaury



Purple Moneywort



round Pimpernell



Red Pimpernell



blue Pimpernell

Spotted Yellow loosestrife

Common Primrose

Yellow Moneywort

Moneywort with pointed leaves

Cowslip

Bird's Eye

Purple Pimpernel

Cowslip

Rivino.

Linnæus joins this and the preceding under one common genus, with the name *primula*; but the diſpoſition of the flowers is a ſufficient diſtinction.

1. Common Cowſlip.

Paralyſis vulgaris.

The root is compoſed of many fibres, connected to a ſmall head.

The leaves are numerous and broad: they are of a dark green on the upper ſide, and whitiſh, and ſomewhat hairy on the under; rough on the ſurface, ſomewhat uneven at the edges, and obtuſely pointed.

The ſtalks riſe in the centre of theſe tufts: they are round, thick, firm, upright, pale-coloured, and a little hairy.

On the top of each ſtand ten or a dozen flowers; theſe are ſmall and yellow: they ſtand in long, hollow, ribbed cups, and are ſucceeded by long, ſlender ſeed-veſſels.

It is common in our paſtures, and flowers in May.

C. Bauhine calls it *Verbaſculum pratenſe odoratum.* Others, *Paralyſis vulgaris.*

It is good againſt diſorders of the nerves. The root has the principal virtue: the country-people boil this in ale, and give it in giddineſſes of the head with ſucceſs.

The juice of it, mixed with vinegar, is alſo uſed to ſnuff up the noſe, againſt headachs: it is leſs violent than the juice of the primroſe root, but very well anſwers its purpoſe.

The flowers of the *cowſlip* are of a gently narcotick quality: they are made into conſerve and ſyrup for this purpoſe, and may be given where other medicines of the ſame quality would be dangerous: they mitigate pain, promote perſpiration, and diſpoſe gently to ſleep. The juice of *cowſlip* leaves and milk drank every day for a fortnight, and afterwards every other day for a month, is a remedy for inveterate headachs.

2. The Oxlip.

Paralyſis flore majore.

The root conſiſts of a large, oblong head, from which there run a vaſt many long and thick fibres.

The leaves are numerous, large, oblong, and rough: they are of a duſky green, and obtuſe.

In the centre of theſe riſes the ſtalk, which is thick, round, firm, upright, of a pale colour, and five inches high.

The flowers ſtand in a cluſter at the top of this ſtalk, in the manner of *cowſlip* flowers, but in every reſpect larger: they are from eight or ten to twenty in number: they have long and ſlender footſtalks; and they are much broader, and of a paler colour, than the *cowſlip* flower: they have very much the aſpect of a parcel of ſmall primroſes fixed upon a *cowſlip* ſtalk: their colour is a whitiſh yellow, and they have very little ſmell.

It is common in our paſtures, flowering with the others.

C. Bauhine calls this ſpecies *Verbaſculum ſylvaticum vel pratenſe inodorum.* J. Bauhine, *Primula veris cauliſera pallido flore inodoro aut vix odoro.*

We call it the *Great cowſlip*, or *oxlip.*

Linnæus makes the primroſe, *cowſlip*, and *oxlip*, all the ſame ſpecies of plant. He deſcribes the *cowſlip*, and introduces the two others under the name of varieties. Let the reader on this occaſion properly underſtand what *varieties* are: they are thoſe changes of appearance ſeen in the ſame ſpecies of plant under different ſtates of nouriſhment, and other accidents. The old writers, when they ſaw a plant whoſe flower was naturally blue or red, with a white one, which is a common accident, called it another ſpecies: this was an error, for that is only a variety.

In the ſame manner, when a plant was ſtarved and ſmall, they often deſcribed it as another ſpecies: this alſo was erroneous: all changes in plants made by ſtarving, and the more numerous ones by culture, are varieties; but no accident of this kind could make a *cowſlip* root produce a primroſe. I have had the *cowſlip*, *oxlip*, and primroſe, brought into a garden, where they continue year after year the ſame, and their ſeeds produce the ſame diſtinct kinds, and no other. Theſe are the teſts whereto we bring plants, in which there is a doubt whether there be diſtinct ſpecies or varieties called ſo, and they are concluſive.

The *oxlip* ſeeming an intermediate plant between the *cowſlip* and primroſe, naturally led Linnæus into this error; but there are theſe gradations in nature every where, though not enough regarded. She travels always by regular and even ſteps: there are no gaps between.

The world is indebted to Linnæus greatly for rejecting many imaginary ſpecies, which he has properly ſet down only as varieties; but in this, and ſome other inſtances, he has carried that point too far. So penetrating a genius is rarely united with a ſtrict and chaſte judgment.

3. Birds Eye.

Paralyſis flore rubente.

The root is compoſed of numerous, thick, and long fibres.

The leaves riſe in a little tuft, and are long and narrow: they are ſmooth, of a pale green, and ſharply ſerrated at the edges.

They ſpread themſelves every way on the ground, and have no footſtalks.

The ſtalk is round and firm, upright, and four inches high.

On its top ſtand many flowers, as in the *cowſlip*, but more erect, and in general more numerous: they are ſmall, of a beautiful pale red; and each ſtands ſeparately on a long, ſlender footſtalk, all riſing from the ſame point on the main ſtalk.

The ſeed-veſſels are ſmall and oblong, and the ſeeds numerous and very minute.

The flowers in this plant differ in more than colour from the *cowſlip*; for the ſegments are not heart-faſhioned or dented at the ends, but plain.

It is not uncommon in the northern counties of England, and flowers in May.

As the *oxlip* connects the *cowslip* and primrose, this plant connects the *cowslip* and auricula.

C. Bauhine calls it *Verbasculum umbellatum alpinum minus.* J. Bauhine, *Primula veris minor purpurascens.*

The auricula would naturally follow here: but as there is no species of that plant native of England, we are obliged, by the method of our established divisions, to refer that to the second series of this class, comprehending the genera: of which there are none natives of Britain.

GENUS XI.

BELLFLOWER.

CAMPANULA.

THE flower consists of a single petal, and is broad, deep, hollow, and divided into five segments at the edge: it stands in a cup formed of one leaf, divided into five segments; and is followed by a single capsule, which is of an oval figure, smooth, and divided into three cells.

Linnæus places this among his *pentandria monogynia*, the threads in each flower being five, and the rudiment of the fruit single; but he confounds three genera under this name, including as species of it the *trachelium*, and *speculum Veneris*.

The species of *campanula* alone are sufficiently numerous; so that there is the greater impropriety in his encreasing them by the addition of those two other genera. These are both abundantly distinguished by nature; the seed-vessel being of a different form in each; and that in a manner so determinate, that it properly and fully may establish a generical mark. In the *campanula*, properly and distinctly so called, we have seen it is oval, and divided into three cells, and is *smooth*; in the *trachelium* it is, in the same manner, divided into three cells within; but it is rough or hairy on the outside: and in the *speculum Veneris* it is long, of a cornered shape, and divided into five cells. Mr. Ray, who keeps up this distinction, calls that genus to which the name of *campanula* is here appropriated, *rapunculus*.

Linnæus separates some of these, placing them among his *syngenesia polygamia monogamia*, under the name of *lobelia*.

DIVISION I. BRITISH SPECIES.

1. Various-leaved Bellflower.

Campanula foliis variis.

The root is long, slender, and furnished with many fibres.

The leaves that rise immediately from it are altogether different from those on the stalk: they stand in a small tuft, and are supported on long, slender footstalks: they are of a roundish figure, but pointed.

The stalks are numerous, round, slender, and ten inches high.

The leaves stand irregularly on them, and are long, narrow, and without footstalks.

The flowers are very large and blue: they stand at the tops of the stalks, and on slender pedicles rising from the bosoms of the upper leaves: they are hollow, wide, open, and divided pretty deeply into five sharp-pointed segments.

The seed-vessel is oval, small, and divided into three cells, in which are numerous little seeds.

It is common in dry hilly pastures, and flowers in June.

C. Bauhine calls it *Campanula minor rotundifolia vulgaris.* J. Bauhine, *Campanula parva anguillarae.*

2. Little various-leaved Bellflower.

Campanula foliis variis minor.

The root is very slender, divided, and full of fibres.

The leaves that rise from it are numerous, small, and beautiful: they stand on short pedicles, and are nearly round: they have no point at the end, but are a little indented for the reception of the pedicle.

Among these rise several slender, round, weak stalks, five inches high, and scarce at all branched.

The leaves on these are narrow, longish, and without footstalks.

The flower is large, and there usually is only one on the summit of each stalk: it is wider and shallower than that of the preceding species, and divided more slightly at the edge: its colour is a pale, but pretty blue.

The seed-vessel is oval, and the seed small.

It is common on the mountains in Wales, and has been met with in some parts of England.

C. Bauhine calls it *Campanula minor rotundifolia alpina.* The flower is sometimes of a snow white.

3. Wild Rampion.

Campanula foliis angustis obtusis.

The root is long, thick, and has few fibres.

The leaves that rise from it are numerous, oblong, of a bright green, undivided at the edges, obtuse at the points, and without footstalks.

The stalk is firm, upright, strait, striated, and two feet and a half high.

The leaves stand irregularly on it: they are long, narrow, and obtuse, and are very lightly serrated.

Toward the top of the stalk there rise many

little branches from the boſoms of the leaves, and on theſe ſtand the flowers.

They are large, blue, ſtreaked with purple, and deeply divided into five ſegments.

The ſeed-veſſel is oval and ſmooth, and the ſeeds are numerous and ſmall.

It is wild in many places on the edges of corn-fields; but it is alſo kept in gardens for the ſake of the root, which ſome people eat.

C. Bauhine calls it *Rapunculus eſculentus*. J. Bauhine, *Rapunculus vulgaris campanulatus*.

The whole plant is full of a milky juice.

4. Ivy-leaved Bellflower.

Campanula cymbalariæ foliis.

The root is ſmall, thready, and divided.

The firſt leaves are ſmall, tender, angulated, and of a beautiful green: they ſtand on long footſtalks, and form a pretty tuft.

Among theſe riſe numerous ſtalks, which ſpread upon the ground: they are three or four inches long, extremely tender, and uſually of a rediſh colour.

The leaves ſtand irregularly on theſe, and reſemble thoſe from the root, but that they are ſmaller: they are angulated and broad; the corners and the point are ſharp, and they are of a freſh and pleaſant green.

The flowers are ſmall, and of a pale blue: they ſtand on long and extremely ſlender footſtalks; and are deep, and cut in at the edge into five ſegments.

The ſeed-veſſel is ſmall, oval, and ſmooth.

It is more frequent in Devonſhire and Cornwal than in the reſt of England, and flowers in May. It loves damp and ſhady places.

C. Bauhine calls it *Campanula cymbalariæ foliis*. J. Bauhine, *Campanula folio hederaceo ſpecies Cantabricæ anguillaræ*.

5. Horned Rampions.

Campanula corniculata montana.

The root is long, thick, white, and furniſhed with numerous fibres.

The leaves that firſt riſe from it are ſhort, and almoſt round, but pointed at the end, and ſome few of them at times oval, or ſomewhat oblong: they are placed on long footſtalks, and ſerrated at the edges.

The ſtalk is tender, ſtriated, hollow, and a foot high.

The leaves ſtand irregularly on it, and are altogether unlike thoſe from the root: they are long, narrow, and ſharp pointed, ſerrated at the edges, and of a pale green; thoſe toward the bottom have long footſtalks, thoſe toward the upper part have none.

The flowers ſtand at the top of the ſtalk in a round, thick head: they are ſmall and purple; but are placed cloſe together, and are diſtinguiſhed by the length of the ſtyle that grows from the rudiment of the capſule; this turns in the manner of a horn; whence the plant has the name of *horned rampions*.

The ſeed-veſſel is ſhort and ſmooth.

It is a perennial plant, and not uncommon in the hilly paſtures of Kent and Suſſex. It flowers in Auguſt.

C. Bauhine calls it *Rapunculus folio oblongo ſpica orbiculari*. Others, *Rapunculus corniculatus montanus*, and *Rapunculus corniculatus orbicularis*.

6. Scabious-headed Rampion.

Rapunculus ſcabioſæ capitulo.

The root is long, white, woody, divided into ſeveral parts, and furniſhed with many fibres.

The firſt leaves are numerous, narrow, ſerrated, ſharp-pointed, of a pale green, and without footſtalks.

In the midſt of theſe riſe the ſtalks: they are numerous, ſlender, divided, and branched, and not perfectly erect; they are a foot or more in height.

The leaves ſtand irregularly on theſe, and are like thoſe from the root, ſmall, oblong, narrow, ſerrated, hairy, and ſharp pointed.

The flowers ſtand at the tops of the branches in round buttons: they are of a pale blue, and very numerous, horned in the manner of the former ſpecies, and have a kind of cup under the whole head.

Each flower is divided into five ſegments, and ſucceeded by a ſeparate capſule, which is ſhort and ſmall, and full of minute ſeeds.

It is common in dry paſtures, and flowers in July.

C. Bauhine calls it *Rapunculus ſcabioſæ capitulo cæruleo*. Others, *Scabioſa minima hirſuta*.

DIVISION II. FOREIGN SPECIES.

1. Cretic Rampion.

Rapunculus foliis pinnatis.

The root is long, thick, white, and furniſhed with fibres.

The firſt leaves are ſimple, roundiſh, and undivided, and reſemble thoſe of the various-leaved *bellflower*. After theſe riſe others, which are pinnated; each compoſed of three pairs of ſmaller leaves ſet on a rib, with an odd one at the end, which is divided into three parts: theſe are of an oval figure, ſharp at the points, and ſerrated at the edges; and are of a pale, but pleaſant green.

The ſtalk is round, erect, firm, and two foot or more in height: it has a few leaves on it of the ſame pinnated form, and toward the top a ſpike of flowers.

Theſe are of a beautiful purple, and ſtand very thick; they are deeply divided into five narrow ſegments, and they quickly fade.

The ſeed-veſſel is oval, and the ſeeds are ſmall.

It is a native of Crete, and flowers in May, after which the whole plant dies down to the root, which ſends up new leaves in October, and theſe remain green all winter.

C. Bauhine calls it *Rapunculus Creticus ſeu pyramidalis*

remdalis altera. Others, *Petromarula*, and *Lactuca petræa.* The whole plant is full of a milky juice.

2. Yellow Bellflower.

Campanula lutea Linifolia.

The root is long, thick, and divided into ſeveral parts.

The firſt leaves are ſhort, narrow, pointed, and without footſtalks: they riſe in thick tufts, and ſtand nearly upright, only with the points turning a little outwards.

The ſtalks riſe from the centre of theſe tufts, and are round, ſlender, weak, and about ſeven inches high: they are not at all branched, and are ſcarce able to ſupport themſelves perfectly erect.

The leaves are numerous, and ſtand irregularly; they are longiſh, narrow, ſharp-pointed, and without footſtalks: they much reſemble thoſe of flax.

The flowers are extreamly large, and very beautiful: they ſtand ſingly, one on each ſtalk moſt commonly, though ſometimes there are more; and they are an inch long, of a very fine orange yellow, deep, and even at the edge.

The cup is divided into five parts, and remains with the ſeed-veſſel, which is oval, ſmooth, large, and full of ſmall ſeeds.

It is not uncommon in France and Italy, and flowers in June.

J. Bauhine calls it *Linifolia campanula lutea.* Lobel, *Campanula linifolia lutea montis lupi flore volubilis.* The flower is indeed very like ſome of the bindweed kinds, particularly the ſea bindweed, but the genera are diſtinct, and this is *true campanula.*

Linnæus ſeparates this plant from among the *bellflowers*, and ranks it as a ſpecies of flax: he calls it *Linum campanulatum.* C. Bauhine, we have ſeen, calls it alſo by ſuch a name; but Linnæus ſhould not follow his authority againſt nature: we ſhall ſee that it is againſt his own ſyſtem alſo. Let us refer to his generical character of flax, *linum*, and we ſhall ſee that its flower, according to his own deſcription, has five petals: how then can this plant be a ſpecies of that genus, when its flower conſiſts of one, and that not ſo much as divided into ſegments at the rim? There are other particulars in which it differs from his generical character of *linum*; but this is ſufficient: he owns he never ſaw it growing. It ſeems a plant intended by nature to connect the *convolvulus* and *campanula* kinds.

3. Pearch-leaved Bellflower.

Campanula perſicæ foliis.

The root is long, thick, divided into ſeveral parts, and furniſhed with fibres in great abundance.

The firſt leaves riſe in a tuft, and are long, narrow, undivided at the edges, and of a bright green.

The ſtalk is round, upright, firm, ſtriated, and two feet and a half high.

The leaves are numerous, and ſtand irregularly upon it: they are long, narrow, undivided, of a beautiful green, and without footſtalks: there frequently riſe tufts of young leaves in the boſoms of the old.

The flowers are very large and beautiful: they ſtand in a kind of irregular ſpike from the middle of the ſtalk to the top: they have long footſtalks, and are of a beautiful blue, ſometimes white: they are broad and ſhallow, and divided into five pointed ſegments at the edge.

The ſeed-veſſel is large, oval, ſmooth, and divided into three cells within.

It is frequently wild in France and Germany. It flowers in June.

C. Bauhine calls it *Rapunculus perſicæ foliis magno flore.* J. Bauhine, *Campanula anguſtifolia cærulea et alba.*

4. Pyramidal Bellflower.

Campanula pyramidalis folio lato.

The root is long, thick, and divided into many parts.

The firſt leaves are few: they are ſhort and broad, a little indented at the edges, pointed at the end, and placed on long footſtalks.

The ſtalks are round, thick, firm, upright, and four foot high.

The leaves ſtand irregularly on them, and are like thoſe from the root, but longer in proportion to their breadth, and more ſerrated: they are placed in the ſame manner on long footſtalks, and are of a pleaſant green.

The flowers ſtand from the middle to the top in a long ſpike of a pyramidal form: they are large, blue, and wide open at the mouth, where they are divided into five ſegments.

The ſeed-veſſel is oval, ſmooth, and large.

It is a native of Spain, and flowers in July.

C. Bauhine calls it *Rapunculus hortenſis latiore folio ſeu pyramidalis.* Others, *Campanula lacteſcens pyramidalis.*

5. Leſſer pyramidal Bellflower.

Campanula pyramidalis minor.

The root is large, long, thick, and divided.

The leaves that riſe from it are very numerous: they ſtand on ſhort footſtalks, and are oblong, broad, ſharply ſerrated at the edges, and ſharp-pointed.

The ſtalk is round, erect, firm, and five feet high.

The leaves ſtand irregularly on it, and are of the ſhape of thoſe from the root, but without footſtalks.

The flowers are large, numerous, and of a pale blue, ſometimes white, as in the other ſpecies: they are deeply divided into five ſegments; and they grow ſeveral together upon very long and ſlender footſtalks, riſing from the boſom of the leaves, as well as at the top of the main ſtalk: the pedicles which ſupport them are ſo weak that they commonly droop.

The ſeed-veſſel is ſmall, oval, ſmooth, and divided into three cells, wherein is a great quantity of ſmall ſeed.

It is a native of the warmer parts of Europe in damp places; and flowers in June.

Alpinus calls it *Campanula pyramidalis minor.*

Various leavd Bellflower

wild Rampion

Ivy leavd Bellflower

Horned Rampion

Scabious Headed Rampion

Cretick Rampion

Yellow Bellflower

Prach leavd Bellflower

Pyramidal Bellflower

lesser Pyramidal Bellflower

Rock Rampion

Serrated Rampion

Oval leavd Bellflower

broad leavd Clusterd Bellflower

Great Throatwort

Nettle leavd Throatwort

Narrow leavd Throatwort

Cluster headed Throatwort

Smooth leavd Throatwort

White Throatwort

6. Rock Rampion.

Campanula petræa foliis variis.

The root is long, thick, ſingle, and has few fibres.

The firſt leaves ſtand on long, ſlender foot-ſtalks, and are of a cordated form, indented at the baſe, and ſharp-pointed: they are undivided at the edges, and of a duſky green.

The ſtalks are numerous, ſix or eight inches high, round, ſmooth, and firm.

The leaves ſtand irregularly on theſe, and are altogether unlike thoſe from the root: they are long, narrow, and ſharp-pointed, not at all indented at the baſe, and undivided at the edges.

The flowers are ſmall, and of a bright blue: they ſtand in ſmall oval heads: one of theſe heads terminates each ſtalk, and conſiſts of a vaſt multitude of flowers.

The ſeed-veſſel is oval, ſmall, and ſmooth.

It grows among rocks in Germany and Italy.

Alpinus calls it *Rapunculus petræus*, and others follow him exactly.

7. Serrated Rampion.

Campanula foliis anguſtis profunde ſerratis.

The root is long, thick, white, and undivided.

The leaves which firſt riſe from it are ſhort, ſomewhat broad, deeply ſerrated, and without footſtalks.

There follow theſe another ſet of leaves, which are alſo without footſtalks; but they are longer and narrower, and more deeply ſerrated.

In the centre of theſe riſes the ſtalk, which is round, firm, upright, and two foot and a half high.

The leaves ſtand irregularly on it, and are like the ſecond from the root, very narrow, long, and deeply ſerrated, and without footſtalks.

The flowers ſtand at the top of the ſtalk, and on long footſtalks riſing from the boſoms of the upper leaves: they are large and blue, deeply divided into five ſegments, and open.

The ſeed-veſſel is oval and ſmall.

It is not uncommon in the woods of Germany, and flowers in June.

C. Bauhine calls it *Rapunculus nemoroſus anguſtifolius major majore flore.*

8. Oval-leaved Bellflower.

Campanula foliis ovatis ſerratis.

The root is long, ſlender, and white.

The firſt leaves are roundiſh and ſerrated: they ſtand on long footſtalks, and are not very numerous.

The ſtalk riſes in the centre of the tuft, and is round, erect, and but little branched.

The leaves ſtand alternately on long footſtalks, and are of an oval figure, pointed at the ends, and ſharply ſerrated. Thoſe toward the lower part are broader and ſhorter, thoſe toward the upper, narrower and longer; and juſt at the top there are a few of a different form, oblong, without footſtalks, and not ſerrated.

The flowers are large, and of a pale blue: they ſtand on long and ſlender footſtalks about the top of the plant, and are not very numerous.

The ſeed-veſſel is oval and ſmooth.

It is frequent in the Harts foreſt.

C. Bauhine calls it *Campanula foliis ſubrotundis.* When it grows on barren ground the flowers are often white.

9. Broad-leaved cluſtered Bellflower.

Campanula latifolia floribus confertis.

The root is long, ſlender, white, and hung with many fibres.

The firſt leaves are oblong, broad, and placed on long, rediſh footſtalks: they are not dented at the baſe, but are broadeſt there, and gradually narrower to the point; and they are a little hairy.

The ſtalk riſes in the centre, and is round, ſlender, not at all branched, pale coloured, and ſomewhat hairy: it is about ten inches high.

The leaves ſtand irregularly on it: they are like thoſe from the root, but narrower, ſharp-pointed, not dented at the edges, but a little hairy: thoſe on the lower part have ſhort footſtalks, the others none.

The flowers ſtand in a thick cluſter at the top of the ſtalk: they are ſmall, and of a beautiful blue, deep, and divided into five ſegments at the edge.

The ſeed-veſſel is oval, ſmooth, and divided into three parts and full of ſmall ſeed.

It is a native of France and moſt other parts of Europe.

C. Bauhine calls it *Rapunculus latifolius umbellatus.* In Engliſh it is commonly called *Umbellated rampion.*

Moſt of the ſpecies of *bellflower* are eſculent plants, particularly the principal of the *rampions.* The roots of ſeveral of theſe are eaten in ſpring, in the manner of radiſhes, raw or boiled, and they are kept in ſome gardens for that purpoſe: they are tender, full of a milky juice, and well taſted. They are ſaid to increaſe milk in the breaſts of nurſes, but that is an idle conceit, grounded only on the milky look of their own juice.

The *common various-leaved bellflower* is celebrated in ſome places as a cure for the ſcurvy: they take the juice in ſpring, with that of cleavers, water creſs, and brooklime. When ſo many things of known virtue are uſed together it is not eaſy to ſay whether ſuch an addition has much efficacy.

The root of any of the *rampion* kinds, if eaten in due quantity, operate by urine; and they are ſuppoſed to create an appetite. We do not uſe them much in England, but they are in great eſteem in France and Italy. They cut them into thin ſlices, and eat them with oil and vinegar.

GENUS XII.

THROATWORT.

TRACHELIUM.

THE flower conſiſts of a ſingle petal, hollow, and divided into five ſegments at the edge: the cup is formed of a ſingle leaf, divided alſo into five ſegments; and the ſeed-veſſel is rough and hairy on the outſide, and is divided into three cells within.

Linnæus places this among the *pentandria monogynia*; and, not regarding the difference of the ſeed veſſel, makes it the ſame genus with *campanula*.

DIVISION I. BRITISH SPECIES.

1. Great Throatwort.

Trachelium foliis longioribus ſerratis.

The root is compoſed of a number of long, ſlender parts, which ſpread under the ſurface, and have many great fibres.

The firſt leaves are very large: they riſe in a great tuft, and ſtand upon long footſtalks: they are very large, oblong, broadeſt in the middle, ſharply ſerrated, and pointed.

In the centre of this tuft riſe the ſtalks, which are round, firm, thick, upright, not much branched, and four feet high.

The leaves on them are numerous, and of the ſame form with thoſe from the root: they frequently grow two, three, or four from the ſame point, but without any great regularity.

The flowers are very numerous, large, and of a purpliſh colour, of different tincts and degrees; ſometimes they are of a deep blue, ſometimes rediſh, and ſometimes white.

The ſeed-veſſel is very large, hairy, and divided into three cells within; it has the ſame ſhort footſtalk which ſupported the flower, and generally hangs downward.

It grows not uncommonly on the mountains in Wales, and in Yorkſhire and ſome other parts of England; and flowers in June.

C. Bauhine calls it *Campanula maxima foliis latiſſimis.* Others, *Trachelium giganteum*; and our Engliſh gardeners, *Giant throatwort.*

2. Nettle-leaved Throatwort.

Trachelium foliis urticæ.

The root is long, thick, and ſpreading.

The firſt leaves exactly reſemble thoſe of the common ſtinging nettle; they are few, and of a duſky green, and hairy, broad at the baſe, ſharp at the point, ſerrated, and ſupported on long footſtalks.

The ſtalks are numerous, firm, upright, hairy, ſtriated, purpliſh, and a yard high.

The leaves ſtand irregularly on them, and have long footſtalks: they are of the ſame ſhape as thoſe from the root, but ſmaller.

The flowers ſtand at the top of the ſtalks, and on ſhort pedicles riſing from the boſoms of the upper leaves: they are very large, and of a beautiful blue, deep, open, and cut into five ſegments at the edges.

The ſeed-veſſel is large, rough, and divided into three cells.

It is common in Kent, Suſſex, and many other countries, and flowers in Auguſt. Its common place of growth is by road ſides.

C. Bauhine calls it *Campanula vulgatior foliis urticæ major et aſperior.* Others, *Trachelium majus*, or *Great throatwort.*

3. Cluſter-flowered Throatwort.

Trachelium floribus glomeratis.

The root is long, large, ſpreading, and furniſhed with many fibres.

The firſt leaves are few and large: they are oblong, broad at the baſe, and ſmaller to the point; and they ſtand on ſhort footſtalks.

The ſtalks are numerous, round, firm, rediſh, erect, and two foot high.

The leaves ſtand irregularly on them, and reſemble thoſe from the root: thoſe on the lower part have ſhort footſtalks, thoſe on the upper part have none.

The flowers are large and blue; ſometimes rediſh, and not unfrequently white: they ſtand in thick cluſters at the tops of the ſtalks, and of the branches riſing from the boſoms of the leaves.

The ſeed-veſſels are large and rough.

It is not uncommon in dry paſtures in many parts of England, eſpecially where the ſoil is chalk. It flowers in July.

C. Bauhine calls it *Trachelium ſive campanula pratenſis flore glomerato.* Others, *Trachelium minus.* We, in Engliſh, uſually, *Little throatwort.*

The root of the great throatwort is aſtringent. A decoction of it in water, and with a little red wine, is excellent againſt the falling down of the uvula, and is a very good gargariſm in many diſorders of the throat: it thence obtained its name.

Dried and powdered it acts as an aſtringent in the bowels, and is good againſt diarrhœas, eſpecially ſuch as are attended with bloody ſtools.

An infuſion of the root of the nettle-leaved throatwort, ſweetened with honey, is a good gargle for ſore mouths. In general all the ſpecies have the ſame virtue: the great throatwort in the principal degree, and this nettle-leaved kind next.

DIVISION II. FOREIGN SPECIES.

1. Narrow-leaved Throatwort.

Trachelium foliis anguſtis.

The root is long, thick, and ſpreading.

The firſt leaves are very large: they are oblong, narrow, ſerrated, and often curled at the edges: they are of a duſky green colour, and have no footſtalks.

The ſtalk is round, upright, firm, rediſh, and a little hairy.

The leaves ſtand irregularly on it, and reſemble thoſe from the root: they are of a pale green, and have no fooſtalks.

The flowers are very large and beautiful: their moſt natural colour is a fine deep blue, but they are ſometimes rediſh or white: they are deep, long, and divided into five ſegments at the edge.

The ſeed-veſſel is large and rough.

It is a native of Spain, and flowers in July.

C. Bauhine calls it *Campanula hortenſis folio et flore oblongo.* Others, *Viola mariana*; and our gardeners *Coventry bells.*

2. Rough-leaved Threadwort.

Trachelium foliis anguſtis ſerratis villoſis.

The root is long, thick, white, and furniſhed with a few fibres.

The leaves that riſe from it are numerous, oblong, narrow, of a browniſh green, hairy, rough to the touch, ſharply ſerrated, and without footſtalks.

The ſtalk riſes in the centre, and is round, firm, upright, and a foot high; it is rough to the touch, and often rediſh.

The leaves ſtand irregularly on it, and are not very numerous: they are narrow, and have no footſtalks.

The flowers are large, of a beautiful blue, and hairy at the edge, and ſtand on the top of the ſtalk, and on long, ſlender footſtalks riſing from the boſoms of the upper leaves.

The ſeed-veſſel is rough and oval.

It grows in Switzerland, and flowers in June.

C. Bauhine calls it *Campanula foliis ovati floribus villoſis.* Others, *Trachelium foliis ovati.*

3. White Throatwort.

Trachelium album.

Several kinds of *throatwort* have the flowers accidentally white, but thoſe of this plant are naturally ſo; the others are only varieties of the ſeveral ſpecies to which they belong, but this is altogether diſtinct.

The root is long, thick, divided into ſeveral parts, and of a rediſh brown

The leaves riſe in a round tuft: they are little, ſhort, pointed, and ſomewhat hairy.

The ſtalks riſe in the centre of theſe: they are numerous, upright, ſtriated, and a foot and a half high.

The leaves ſtand irregularly on them, and are moderately large, oblong, undivided at the edge, and hairy.

The flowers ſtand at the tops of the ſtalks in thick tufts: they are white, moderately large, and deeply divided into three ſegments.

The ſeed-veſſel is oval, rough, and divided into three cells.

It is a native of the mountainous parts of Switzerland, Germany, and Italy; and flowers in Auguſt.

C. Bauhine calls it *Campanula alpina ſphæroce-phalos.* J. Bauhine, *Trachelium majus petræum.*

GENUS XIV.

VENUS' LOOKING-GLASS.

SPECULUM VENERIS.

THE flower conſiſts of a ſingle petal divided into five ſegments at the edge. The ſeed-veſſel is long, ſingle, of a cornered ſhape, and is divided into three cells within.

Linnæus places this among his *pentandria monogynia*; the threads of the flower being five, and the rudiment of the fruit ſingle; but he joins it, as of the ſame genus, with the campanula, from which we ſee it manifeſtly differs in the form of the ſeed-veſſel, as well as in its general aſpect.

DIVISION I. BRITISH SPECIES.

1. Great Venus' Looking-glaſs.

Speculum Veneris major.

The root is ſmall, long, woody, white, and furniſhed with many fibres.

The ſtalks are numerous, weak, very much branched, and about ſeven or eight inches high: they do not ſtand erect, but lean and bend.

The leaves are ſhort and broad: they are of a deep green colour, placed irregularly, often, as it were in pairs in many parts, in others alternately and diſtant: they are ſharply ſerrated at the edges, pointed at the ends, and broadeſt in the middle; and they have no footſtalks.

The flowers ſtand on the tops of the ſtalks and branches: they are ſmall, of a deep purple,

and divided into five ſegments; theſe, toward evening, cloſe, and the flower has the look of a little arrow head of a pentagonal form: from this ſhape and its colour ſome have called this the *pentagonal violet.*

The ſeed-veſſel is long, and has ſharp edges: the ſeeds are numerous and ſmall.

It is common in the corn-fields of the north of Ireland, but not in England. It flowers in July.

C. Bauhine calls it *Onobrychis arvenſis ſive campanula arvenſis erecta.* J. Bauhine, *Avicularia ſylvii.*

2. Little Venus' Looking-glaſs.

Speculum Veneris minus.

The root is ſmall, long, white, woody, and furniſhed with numerous fibres.

The ſtalk is hollow, tender, ſtriated, and commonly three or four inches only in height, but in places where it is well nouriſhed it will riſe to a foot; ſo that, although called the leſſer ſpecies, it is in this caſe taller than the other, but it is ſcarce at all branched.

The leaves are little, and have no footſtalks: they are ſhort and broad, obtuſe at the ends, and waved, or, as it were, curled at the edges.

The flowers ſtand at the top of the ſtalk, and on ſhort footſtalks riſing from the boſoms of the leaves, one flower on each.

They are ſmall, of a bright purple colour, and ſtand upon the rudiment of the pod or ſeed-veſſel.

When they are fallen this ſwells and lengthens, and becomes a long capſule, reſembling a pod, ridged, and ſharp at the edges, and contains a great deal of minute ſeeds.

Ray calls it *Campanula arvenſis erecta vel ſpeculum Veneris minus:*

It is not uncommon in our corn-fields in Suſſex and ſome other counties; and flowers in June.

DIVISION II. FOREIGN SPECIES.

1. Great flowered Venus' Looking-glaſs.

Speculum Veneris magno flore.

The root is ſmall, white, long, and woody.

The ſtalks are numerous, weak, branched, and five or ſix inches high.

The leaves are numerous, oblong, and without footſtalks: thoſe toward the lower part of the ſtalk are longer and more obtuſe; thoſe toward the upper part, ſmaller and ſharper at the point.

The flowers are very large, and of a beautiful pale purple, with a white eye in the centre, and ſome blue about it: they are divided into five ſegments, and are hollow.

The ſeed-veſſel is long and angulated, and the ſeeds are large, ſhining and brown.

It is a native of Thrace, and flowers in June.

Ray calls it *Speculum Veneris flore ampliſſimo Thracicum.*

2. Perfoliate Venus' Looking glaſs.

Speculum Veneris perfoliatum.

The root is long, ſlender, fibrous, and white.

The ſtalks are numerous, and tolerably erect: they are round, thick, of a whitiſh colour, and a little hoary.

The leaves are broad and ſhort: they ſtand irregularly, and ſurround the ſtalk at the baſe; ſo that it ſeems to grow through them.

The flowers are large, and of a pale but beautiful red: they are deeply divided into five ſegments, and they ſtand on the tops of the ſtalks, and on ſhort pedicles riſing from the boſoms of the leaves.

The ſeed-veſſel is long, and angulated; and the ſeed moderately large, and of a gloſſy ſurface.

It is a native of Virginia, and flowers in June.

Moriſon calls it *Campanula pentagonia perfoliata.*

The *Venus looking-glaſs* agrees with the bell-flowers and rampions in its qualities.

The larger kind, which is very common in the corn-fields of France, is one of their favourite ſallad herbs. They gather the firſt leaves and eat them in the ſpring. The common ſallading, known among them by the name of *queue de l'eveſque*, is the firſt ſhoot of this plant: beſide its agreeable taſte, it is ſuppoſed to be a good antiſcorbutick.

GENUS XIV.

LINNÆA.

THE flower conſiſts of a ſingle petal, hollow, open, divided into five ſegments at the edge, and reſembling the campanula: the fruit is of an oval form, divided into two cells, and covered with its peculiar cup: it is in a manner of the berry kind, but not juicy.

The cup is double; there is one for the fruit juſt named, and another for the flower: the cup of the fruit is compoſed of four leaves, two of which are ſmaller, two larger: the cup of the flower conſiſts of a ſingle leaf, divided into five ſegments.

Gronovius eſtabliſhed this genus, and named it in honour of Linnæus; but though the name and character be new, the reſt is familiarly known. There is but one ſpecies of it; and that is the plant deſcribed by Bauhine, Gerard, Parkinſon, and the reſt, under the name of *thyme-leaved bellflower.*

Linnæus places the genus among his *diynamia angioſpermia*; there being four threads in the flower, two of which are taller than the others, and the ſeeds being covered: there is one only in each fruit.

Linnæa.

The root is long, ſlender, divided, and furniſhed with fibres.

The ſtalks are numerous, ſlender, round, and commonly rediſh: they lie upon the ground, and take root at different places, thus ſpreading into large tufts.

The leaves are ſhort, broad, ſerrated, and ſharp-pointed: they ſtand in pairs, and have no footſtalks.

The flowers are moderately large, of a pale purple, and divided deeply into five ſegments: they ſtand on long, ſlender footſtalks, which ſometimes terminate the branches, and ſometimes riſe from the boſoms of the leaves.

The ſeed-veſſel is oval, ſmall, and ſmooth.

It is a native of Ireland; but is not found wild in England. It flowers in July.

C. Bauhine calls it *Campanula ſerpyllifolia*; a name that does not very well expreſs the plant; but moſt other writers have copied it.

GENUS XV.

BUCKBEAN.

MENYANTHES.

THE flower conſiſts of a ſingle petal, divided into five ſegments, which are hairy: the fruit is a ſingle capſule, of an oval figure, and undivided within: this ſtands ſurrounded with the cup, which is formed of a ſingle leaf, divided into five ſegments, and hairy within: the leaves ſtand three on a ſtalk.

Linnæus places this among the *pentandria monogynia*, the threads in each flower being five, and the rudiment of the fruit ſingle.

This author joins in this genus with the *buckbean*, properly called *menyanthes*, the *little water-lilly*; but they are plants altogether differing in ſhape and qualities, though their flowers are alike. The diſpoſition of the leaves, which is by threes in this plant, and ſingly in the other, is a ſufficient and obvious mark of diſtinction.

Where nature happens to have given flowers of the ſame form to plants very different in form and qualities, we are not to confound the genera ſhe has eſtabliſhed, by joining them together under one name, but to ſeek in the reſt of the plant thoſe particulars which may keep them ſeparate.

Of this genus there is but one known ſpecies, which is a common wild plant among us.

Common Buckbean.

Menyanthes vulgare.

The root is long, thick, jointed, rediſh on the outſide, white within, and runs obliquely under the ſurface.

The firſt leaves ſtand three on each footſtalk; and theſe footſtalks are thick, and rediſh at the bottom.

The leaves are large, oblong, of a freſh green colour, and of a thick, fleſhy ſubſtance: they are broadeſt in the middle, pointed at the end, and undivided at the edges.

The ſtalk is thick, round, ten inches high, and not at all branched: it is rediſh at the bottom, and is there generally enveloped by the broad bottoms of footſtalks of ſeveral leaves that riſe with it, and ſurround it to ſome height.

Theſe are like thoſe from the root, but ſmaller; and there are no others on the ſtalk.

The flowers ſtand at the top in a thick, ſhort ſpike; and are large, and very beautiful: their colour is whitiſh, but with a faint bluſh of red, and they are hairy or rough on the inſide.

The ſeed-veſſel is large and oval.

It is common in damp paſtures, and on boggy grounds, and flowers in July.

C. Bauhine calls it *Trifolium paluſtre.* Tournefort, *Menyanthes paluſtre triphyllum.*

It is a plant deſervedly celebrated for its virtues: it is diuretick and deobſtruent in a great degree, and has a bitterneſs extremely ſerviceable to the ſtomach.

It is good in dropſies, the jaundice, the ſcurvy, the rheumatiſm, and in intermittent fevers.

For dropſies the beſt method of giving it is to expreſs the juice after bruiſing the plant, with a little white wine.

In the ſcurvy, a ſtrong infuſion taken twice a-day for a continuance, is of great effect: there are not wanting thoſe who give it in the gout in the ſame manner.

For intermittent fevers, it ſhould be dried carefully, and powdered; half a dram is a doſe; and I have known it ſucceed where the bark has failed.

GENUS XVI.

FRINGED WATER LILLY.

NYMPHOIDES.

THE flower conſiſts of a ſingle petal, divided deeply into five ſegments, which are cut or fringed at the edges: the ſeed-veſſel is large, and ſimple in its ſtructure: the leaves ſtand ſingly, one on each footſtalk.

Linnæus, as we have ſeen, properly places this among his *pentandria monogynia*, the threads in each flower being five, and the rudiments of the fruit ſingle; but improperly confounds it under the ſame generical name with buckbean, the general form and the virtues being different.

1. Yellow-fringed Water Lilly.

Nymphoides flava.

The root is a tuft of thick, black fibres.

From this, which is buried in the mud, riſe many weak, trailing ſtalks, which take root again at certain diſtances, and ſpread the plant far and wide.

The leaves ſtand on long footſtalks: theſe uſually riſe to the ſurface of the water, on which the leaves naturally float: they are of a freſh green, thick, and ſmooth.

The ſtalks are thick, ſoft, round, ſpungy, and jointed.

The flowers are large and yellow: they ſtand on thick footſtalks, and are beautifully notched and jagged, in the manner of a fringe, about the edges.

The ſeed-veſſel is long and large, and contains a great number of ſeeds.

It is not uncommon in ſhallow waters; we have it abundantly about Brentford. It flowers in July.

C. Bauhine calls it *Nymphæa lutea minor flore fimbriato*; a name moſt others have copied.

The leaves are cooling: their juice, mixed with honey, is good for ſore mouths. The country-people give it alſo in overflowings of the menſes with wine. We ſee by this that it partakes of the qualities of the *common water lilly*, and is by no means to be confounded with buckbean, whoſe virtues it has not, nor any qualities at all like them.

The common kinds of *water lilly*, though they reſemble this plant in their manner of growth, differ extremely in their flowers, and are to be treated of among plants that have ſeveral petals, not with theſe which have only one.

GENUS XVII.

WATER VIOLET.

HOTTONIA.

THE flower conſiſts of a ſingle petal, divided into five ſegments: the fruit is a ſingle capſule, with only one cell, of a round ſhape, but terminating in a point, and is placed on the cup, which is formed of a ſingle leaf, divided into five parts.

Linnæus ranges this among his *pentandria monogynia*, the threads being five in each flower, and the rudiment of the fruit ſingle.

Of this genus there is but one known ſpecies, and that is a common plant in our ditches and ſhallow ponds.

Water Violet.

Hottonia.

The root is a tuft of black, long, and ſlender fibres: theſe penetrate deep into the mud.

The leaves are long, large, and very beautifully pinnated: they conſiſt each of ten, twelve, or more pairs of long and narrow ſegments, regularly diſpoſed, and an odd one at the end.

From the baſe of this cluſter of leaves there generally are propagated ſome long, ſlender ſtalks, which take root again as they run upon the ſurface of the mud, and in theſe places ſend up freſh cluſters of leaves.

In the centre of theſe leaves riſes the ſtalk, which is to ſupport the flowers: this is tall, upright, round, ſlender, and naked.

The flowers ſtand in little cluſters at and near the top: they are moderately large, very pretty, and of a whitiſh colour, tinged with red.

The ſeed-veſſel is ſingle and ſmall.

It is frequent in ſhallow waters that have muddy bottoms, and flowers in June.

C. Bauhine calls it *Millifolium aquaticum, ſeu Viola aquatica caude nudo.* Boerhaave, *Hottonia*; a name uſed now generally for it.

The leaves are cooling, externally applied; but they are more uſed by country people than by phyſicians.

GENUS XVIII.

SALTWORT.

GLAUX.

THE flower conſiſts of a ſingle petal, divided into five obtuſe ſegments: the ſeed-veſſel is a ſingle capſule, having only one cell, and containing five ſeeds. There is no cup; wherefore ſome have called the flower a cup, and ſaid the plant has no flower. This is a cuſtom with many writers, when the flower remains with the fruit; but it is unnatural, and therefore improper.

Linnæus places this among his *pentandria monogynia*; the threads being five in each flower, and the rudiment of the fruit ſingle.

Of this genus there is but one known ſpecies, and that is a common wild plant about our ſea-coaſts.

Black

Black Saltwort.

Glaux maritima.

The root is compoſed of a cluſter of ſlender fibres.

The ſtalks are numerous, and thoſe which ſhoot firſt generally lie upon the ground, and take root again at little diſtances.

The ſucceeding ſtalks riſe in the centre of theſe, and are round, ſlender, five or ſix inches high, and tolerably erect.

The leaves ſtand in pairs at ſmall diſtances: they are oblong, ſmall, and of an inverted oval figure; the part where they grow to the ſtalk being narroweſt, and the leaf growing broader to the end.

The flowers are ſmall and rediſh: they ſtand without footſtalks, cloſe in the boſoms of the leaves, and are very pretty.

The ſeed-veſſel follows, and is large in proportion to the plant.

It is common on our ſalt-marſhes, and elſewhere about the ſea-coaſt, and flowers all ſummer.

C. Bauhine calls it *Glaux maritima.* Others, *Glaux exigua maritima.* We, *Saltwort*, and *Sea Milkwort*, from a notion of its encreaſing the milk in the breaſts of nurſes.

This is all the virtue or uſe attributed to it; and this ſeems to ſtand upon a very precarious foundation.

GENUS XIX.

GREEK VALERIAN.

POLEMONIUM.

THE flower conſiſts of a ſingle petal, which is tubular in the lower part, and divided into five, broad ſegments at the rim: the fruit is a ſingle capſule, of an oval form, with three riſing edges, and it contains three cells: the cup is compoſed of a ſingle leaf, divided into five ſegments.

Linnæus places this among the *pentandria monogynia*; the threads in each flower being five, and the rudiment of the fruit ſingle.

It would be well if this genus had a better name. Its Engliſh one, which is the tranſlation of the vulgar Latin name, it received from the reſemblance of the leaves in the common kind to thoſe of ſome of the *valerians*; plants from which it is altogether different in character, and therefore ill confounded in name: the Latin one we give here, which is that uſed by the more accurate writers, ſounds too like that of poleymountain; a plant from it as different, and with which it would be as erroneous in the ſtudent to confound it as with *valerian.*

DIVISION I. BRITISH SPECIES.

Common Greek Valerian.

Polemonium vulgare.

The root is compoſed of numerous, thick, and long fibres.

The leaves riſe in a large tuft, and are extremely beautiful: they are of the pinnated kind, and each is compoſed of a great many pairs of pinnæ or ſmaller leaves, diſpoſed with great regularity along a middle rib, with an odd one at the end: they are of a beautiful green.

The ſtalks riſe in the centre of this tuft of leaves; and are green, hollow, thick, ſtriated, upright, and two feet high.

The leaves ſtand alternately on them, and are like thoſe of the root, pinnated in the ſame elegant manner, but ſmaller.

The flowers ſtand in large cluſters at the tops of the ſtalks, and of ſmall branches, riſing from the boſoms of the leaves: they are large, and of a beautiful blue, ſometimes white.

The ſeed-veſſels are large and light, and the ſeeds numerous.

It is not uncommon wild in damp places in Yorkſhire, and the other northern counties; and its beauty has brought it into frequent uſe in our gardens.

C. Bauhine calls it *Valeriana cærulea.* J. Bauhine, *Valeriana Græca quibuſdam colore cæruleo & albo.* Tournefort, *Polemonium vulgare cæruleum.*

Its virtues are not known.

DIVISION II. FOREIGN SPECIES.

Large-flowered Greek Valerian.

Polemonium flore magno.

The root is compoſed of numerous long fibres.

The firſt leaves are large, and of the pinnated kind; the pinnæ are oblong, and very numerous, and are terminated by an odd leaf.

The ſtalk is erect, ſtriated, and firm.

The leaves are like thoſe from the root, but ſmaller, and paler coloured: they are placed alternately, and at conſiderable diſtances.

The flowers are large, and of a bright red: they ſtand in a kind of thick cluſters at the tops of the ſtalks and branches.

The ſeed-veſſel is large, and has three ribs very plain and firm.

It is a native of Carolina.

Dillenius calls it *Quamoclit pinnatum erectum floribus in Thyrſum diſpoſitis*; but it is properly a *polemonium.*

GENUS

GENUS XX.

WOOD SORREL.

OXYS.

THE flower conſiſts of a ſingle petal, very deeply divided into five ſegments; ſo that they adhere only at the baſe: the fruit is a ſingle capſule, of a five-cornered ſhape, divided into five cells within, and contains numerous ſeeds, which leap out with violence when the capſule burſts open: the cup is very ſmall; it is formed of a ſingle leaf, divided into five ſegments, and remains with the ſeed-veſſel.

Linnæus places this among the *decandria pentagynia*; the threads in each flower being ten, and the ſtyles riſing from the rudiment of the capſule five. He calls it *oxalis*, a word many of the botanical writers have alſo uſed; but *oxys* is the more univerſally received: the alteration is trifling; and, while it can do no good, may breed confuſion, the *common ſorrel* being called by many writers by that name.

DIVISION I. BRITISH SPECIES.

Wood Sorrel.

Oxys vulgaris.

The root is ſlender, irregularly notched, and creeping, and has numerous fibres.

The leaves riſe in many little cluſters, and from their colour and manner of growing have a very beautiful appearance.

The footſtalks are long, tender, weak, and rediſh; and they riſe ten, twelve, or more, from the ſame head: at the top of each ſtand three leaves; theſe are of a heart-faſhioned ſhape, the point being the end at which they join the ſtalk; from this they grow broader all the way, and are indented at the middle of the large end.

The flowers are moderately large, and white, with a bluſh of red: they ſtand on ſhort and ſlender footſtalks riſing immediately from the root, and ſeem compoſed each of five petals: the diviſion is ſo deep, that theſe parts join only at the baſe.

The ſeed-veſſel is longiſh; and, when the ſeeds are ripe, it burſts with violence on the leaſt touch, or with the wind, and ſcatters the ſeeds.

It is common in woods, and flowers in March.

This is the only ſpecies we have native of England; but when it grows in drier places, it is ſmaller, and flowers later. This has by ſome been deſcribed as a diſtinct ſpecies; but there is no more difference than what the common accidents of ſoil and ſituation give.

It is a pleaſant, cooling, and uſeful plant. A conſerve is made of it, which allays the burning heat of the mouth in fevers.

It is alſo good againſt obſtructions of the viſcera: to this purpoſe the juice ſhould be taken.

DIVISION II. FOREIGN SPECIES.

1. Yellow Wood Sorrel.

Oxys lutea.

The root is long, ſlender, divided into ſeveral parts, and furniſhed with many fibres.

The firſt leaves are ſmall, and ſtand on naked pedicles or footſtalks, three on each, in the manner of the *common wood ſorrel*, but ſmaller, and paler, and the ſtalk is ſhorter.

Among theſe riſe numerous ſtalks: they are eight or ten inches long, round, tender, very much branched; and they lie upon the ground, taking root at the joints.

The leaves on theſe ſtand irregularly, and in all reſpects reſemble thoſe from the roots: they have long, ſlender footſtalks, and three ſtand on each: theſe are narrow, and of a heart-faſhioned ſhape, the point growing to the ſtalk, and the other end being deeply dented.

The flowers ſtand on ſhort footſtalks, two or more together, and are ſmall and yellow.

The ſeed-veſſel is long and edged.

It is common in damp and ſhady places in Italy, and flowers in May.

C. Bauhine calls it *Trifolium acetoſum corniculatum.* Others, *Oxys lutea*, and *Oxys luteo flore.*

2. Upright American Wood Sorrel.

Oxys Americana erecta.

The root is long, ſlender, and divided into many parts.

The firſt leaves are numerous, and ſtand on long footſtalks: they riſe in a thick tuft, and on each footſtalk there are three; they are broad, heart-faſhioned, and of a pale green.

The ſtalk riſes in the midſt of theſe, and is hollow, ſtriated, pale, and a foot and half high.

The leaves ſtand irregularly on this, and reſemble thoſe from the root: they have long footſtalks, and grow three on each, and are heart-faſhioned.

The flowers grow alſo on the tops of long, ſlender footſtalks, many in a cluſter: they are ſmall, and of a pale yellow, and quickly fall off.

The ſeed-veſſel is long, pointed, and edged, and the cup remains with it.

This is frequent it. Virginia, and other parts of North America, and flowers in May.

Tournefort calls it *Oxys Americana erectior.*

3. Purple

Venus Looking Glass

Small Venus Looking glass

Perfoliate Venus Looking Glass

Sinnea

Buckbean

Water Trifoil

Black Saltwort

Greek Valerian

Wood Sorrel

Upright American Wood Sorrel

Purple bulbous Wood Sorrel

Yellow Wood Sorrel

Crested Milkwort

Small leaved Wood Sorrel

Great flowered Wood Sorrel

Great Purple Milkwort

Common Milkwort

Feathered Milkwort

3. Purple bulbous Wood Sorrel.

Oxys purpurea bulbosa.

The root is a little bulb; composed of several parts, in the manner of that of a lilly, and has a tuft of tender fibres growing from its bottom.

The leaves stand three on a footstalk, as in the common kind, and are of the heart-fashioned shape: the footstalk is slender, weak, and reddish.

The flowers stand several together on the top of a naked stalk: this is taller and more robust than the footstalks of the leaves, but not at all branched; nor are there any leaves on it.

The flowers are large, and of a beautiful purple.

The seed-vessel is long, edged, and angulated.

It is a native of Virginia, and flowers in April.

Plukenet calls it *Oxys purpurea Virginiana radice lillii more nucleata.*

4. Small-leaved Wood Sorrel.

Oxys foliis minioribus ramosa.

The root is roundish, large, and made up of several heads, like the lilly-root.

The first leaves are small, and very numerous: they rise in a little cluster, without any visible footstalk; three stand together, and they are small, sharp-pointed, and yellowish.

In the centre of these rises the stalk, and they soon after wither; so that there does not remain the least mark there ever were any.

The stalk is upright, firm, branched, and four or five inches high.

The leaves stand thick upon it from top to bottom: they grow three together without any footstalk, and are short and pointed.

From the bosoms of the upper leaves rise small and slender footstalks of a considerable length; on each of which there is a single flower: this is large, and of a beautiful purple.

The seed-vessel is long, ridged, and pointed.

It is a native of Æthiopia, and flowers in May.

Burman calls it *Oxalis bulbosa foliis angustis ternis hirtis flore purpureo.*

5. Great-flowered Wood Sorrel.

Oxys flore maximo.

The root is long and slender: it runs obliquely under the surface, and has frequent little bulbous heads growing to it, and numerous clusters of fibres.

The leaves are numerous, and not unlike those of our *common wood sorrel:* they stand three together on long, tender footstalks, and are heart-fashioned, and of a pale green.

Among these rise several tender, naked stalks, taller than those of many of the leaves; and on each of these stands a single flower.

This is of a pale purple, very large, and very beautiful; and consists, like the others, of a single petal, so deeply cut into five segments, that they seem absolutely distinct.

The seed-vessel is long and pointed.

It is a native of Æthiopia, and flowers in May.

Commelin calls it *Oxys bulbosa Æthiopica minor folio cordato.* Others, *Great-flowered oxys.*

The leaves of all these foreign kinds have the same sour taste with those of the *common oxys*, some in a greater, some in a lesser degree; but not one of them excels our own. They probably have all the same virtues, differing only in proportion to the degree of acidity we perceive in their tastes.

GENUS XXI.

MILKWORT.

POLYGALA.

THE flower consists of a single petal, divided to the bottom into four parts; so that it appears to be formed of so many distinct petals: the seed-vessel is a capsule of a compressed, heart-fashioned shape: the cup is composed of three leaves, two of which stand below, and the other three above the flower.

This is a perplexing plant to most of the system-makers. Its flower is very singular in form; therefore it has been called an irregular one, and most have supposed the segments so many distinct petals.

Linnæus places it among his *diadelphia octandria*, the threads in the flower being eight; and collected into two clusters, as if they rose from two heads.

Ray has ranged it better than any: he found that the segments united at the bottom, and the flower truly consisted of a single petal, and that the seed-vessel was single; he therefore justly made it one of his *Herbæ fructu sicco singulari flore monopetalo.*

DIVISION I. BRITISH SPECIES.

1. Blue-flowered Milkwort.

Polygala vulgaris.

The root is long, slender, divided into many parts, spreading, and furnished with numerous fibres.

The first leaves are numerous, broad, and short: they grow in little clusters upon the young shoots, and have no footstalks.

The stalks rise among these, and often those shoots themselves lengthen into stalks: they are numerous, weak, procumbent, and of a pale green:

green: they are extremely branched: and as they grow in length, the ſhort firſt leaves drop off: they grow to eight or nine inches long; but far the greateſt part of it lie upon the ground, few of them ſtanding up farther than the ſpike of flowers.

The leaves ſtand irregularly on theſe ſtalks, and are unlike the firſt: theſe are longiſh, narrow, and pointed.

The flowers ſtand in long looſe ſpikes, and are of a pale blue.

The ſeed-veſſel is flat and large: the ſeeds are numerous, and ſmall.

It is common in dry paſtures, and flowers in July.

C. Bauhine calls it *Polygala vulgaris*. Others, *Polygala minor*.

No plant varies more than this in its aſpect and manner of growth, according to the accidents of place and nouriſhment.

The flowers, though naturally blue, are often rediſh, and often white ſtriated more or leſs with blue or red, ſometimes white altogether. In this condition, ſome authors have deſcribed it as a different ſpecies, or made one or two more, all ſuppoſed different.

We have obſerved that the firſt leaves are ſmall and ſhort, and that theſe uſually fall off; but ſometimes there grow no others, theſe being continued upon the ſtalks their whole length: in this caſe the ſtalks generally lie altogether upon the ground, and the plant has been deſcribed as a diſtinct ſpecies under the name of *Polygala myrtifolia paluſtris humilis & ramotior*.

Mr. Ray himſelf is not without theſe ſlips: 'tis commonly on damp, poor ground it aſſumes this form.

In all theſe conditions the ſpecies is the ſame, and, under proper advantages of ſun and nouriſhment, would at any time put on its proper face again. Some few years ſince, I ſaw a very remarkable inſtance of this. There grows a great deal of *milkwort* on the edge of a ſmall bog on Hampſtead heath: this, while the bog was wet, to the top, was full of ſhort, broad leaves, and ſpread upon the ground in numerous branches: afterwards, ſome ſlight trenches were cut through the bog, which drained it a little; and then the *milkwort* grew more erect, and had fewer branches, and long, narrow leaves.

Theſe trenches are now filled up again in a great meaſure by the ſwelling of the boggy earth at their ſides, as all trenches in ſuch ground will, if not frequently cleaned; and that part of the *milkwort* which grows loweſt is ſpreading on the ground, and getting into the myrtle leaved ſtate again.

Experience here ſhews ſtrongly what we have occaſion often to aſſert with equal truth, though leſs authenticated by evidence, that plants which appear very different, are only varieties of one and the ſame ſpecies. Few imagine what is in the power of accidents in the place of growth.

2. Upright red Milkwort.

Polygala purpurea erecta.

We have ſeen what changes the difference of ſoil make in the *common milkwort*; but we here treat of a ſpecies altogether diſtinct. No change of place, or accidents of any kind, could reduce this plant to the condition of the *common milkwort*, or raiſe that to the ſtate of this: its own ſeeds produce it, and no other.

The root is long, ſlender, and divided into many parts.

The leaves on the firſt ſhoots are ſmall, but not broad: they are numerous, ſhort, and ſharp-pointed.

The ſtalks are firm, rigid, erect, and ten inches high.

The leaves are numerous, and ſtand irregularly: they are narrow, of a deep green, ſharp-pointed, and ſmooth.

The flowers ſtand upon the tops of the ſtalks in a ſhort ſpike: they are large and purple.

The ſeed-veſſel is flat, large, and full of minute ſeeds:

It is common in hilly paſtures, and flowers in July.

C. Bauhine calls it *Polygala major*. J. Bauhine, *Polygala vulgaris major*.

I have never ſeen any variation in the colour of the flower in this ſpecies: it is always of the ſame ſtrong uniform red.

DIVISION II. FOREIGN SPECIES.

1. Creſted Milkwort.

Polygala criſtata.

The root is long, ſlender, and ſimple.

The ſtalks are numerous, round, hard, and firm; part lie upon the ground, and part ſtand erect among them.

The leaves grow often in pairs, but not certainly or regularly ſo: they are ſmall, ſhort, obtuſe, moderately broad, of a dead green, and very rough to the touch.

The flowers ſtand in long creſted ſeries on the tops of the ſtalks, ſometimes in a ſingle, ſometimes a double ſeries; and they are ſmall, and purpliſh or white.

The ſeed-veſſel is minute, and very flat, the ſeeds are very ſmall and yellow.

It is a native of Æthiopia, and flowers in June.

Plukenet calls it *Polygala Æthiopica anguſtis hirſutis foliis flore obſolete purpureo*; but the flowers are oftener white than purple.

2. Feathered Milkwort.

Polygala criſtis fimbriatis.

The root is woody, long, divided, and ſpreading.

The ſtem is woody, and divided into many branches.

The leaves ſtand irregularly; and are long, narrow, of a pale green, undivided at the edges, and pointed at the ends.

The flowers are large, and very beautiful: they ſtand in long ſpikes, and each has its ſeparate long and ſlender footſtalk; they are defended by a broad covering, compoſed of three leaves,

leaves, as the cup in the common kind is; and have at the top a double creſt that has a feathered aſpect: the colour of the flower is a lively purple.

It is a native of Æthiopia, and flowers in May.

Burman calls it *Polygala fruticeſcens foliis linearibus flore majore purpureo.*

There are ſeveral ſpecies of *polygala* that are abſolute ſhrubs and trees: theſe we ſhall treat of in their place: this approaches to them, and may ſerve as the laſt of the others, and to ſhew the gradation.

3. The Sennekka Rattle-ſnake Plant.

Polygala radice marginata.

The root is long, ſlender, and divided into ſeveral parts: it ſpreads irregularly under the ſurface, and is of a brown colour: it is very ſingular in that there runs an edge or margin of a membranaceous ſubſtance on each ſide all the way along it.

The firſt ſhoots are numerous and full of leaves: theſe are ſhort, narrow, and ſharp-pointed.

The ſtalks are a foot high: they are round, weak, and of a pale green.

The leaves ſtand irregularly on them, and are oblong, narrow, of a pale green, and pointed at the end.

The flowers ſtand in a long, looſe ſpike, and are white or bluiſh.

The ſeed veſſel is flat, and the ſeeds are numerous, yellowiſh, and ſmall.

It is a native of North America, and has been of late introduced into medicine, under the name of *radix ſenekka*, or the *rattle ſnake root*.

The knowledge of its virtues was firſt owing to the Indians, who have recourſe to it againſt venomous bites, that of the rattle-ſnake not excepted, from which it took its name.

It is excellent in pleureſies and quinzies, and all other diſorders of that kind. It has had the fate of many good things, to be talked too high at firſt. Dr. Tennent, who introduced it here, recommended it with the warmth natural to the inventor of a new method of cure; and from his ſaying too much in its praiſe people came to ſuppoſe it deſerved leſs than it really does. It is truly a great medicine, though now fallen into diſuſe.

The *common milkwort* is a purge. A handful of the leaves boiled in ale is a doſe for a ſtrong man: it works briſkly, and without any ill effect.

The root dried and powdered is a ſudorifick; ten grains is a doſe.

GENUS XXII.

DODDER.

CUSCUTA.

THE flower conſiſts of a ſingle petal, tubular at the baſe, and divided into four ſegments at the edge: the ſeed-veſſel is a ſingle, roundiſh capſule, containing two ſeeds: the cup is divided into four ſegments.

Linnæus places this among his *tetrandria digynia*; there being four threads in every flower, and the rudiment of the capſule giving origin to two ſtyles.

That author, in his *Genera Plantarum*, improperly joins the *baſella* with this genus: the *baſella* having, as himſelf acknowledges, a ſingle ſeed after every flower, not contained in any capſule, but ſurrounded in the lower part by a ſucculent cup: neither do the other characters of *cuſcuta* agree with this plant.

In his *Species Plantarum* he places them ſeparate, making the *baſella*, as it properly is, one of his *pentandria trigynia*; for in that genus the threads are only five, and the ſtyles three. Of this Linnæus was ſenſible, when he ranked it with *cuſcuta*, whoſe threads are only four, and whoſe ſtyles two.

We have given ſufficient inſtances, that this method of claſſing plants is frivolous; here is a proof its author thought it ſo: why therefore did he endeavour to recommend to others what he had himſelf found inſufficient?

We have obſerved that the ſeed of *baſella* ſtands in a fleſhy cup, otherwiſe uncovered. The reader will therefore ſee plainly why we do not add it to the genus of *cuſcuta*: it is not ſo much as of this claſs, for it has no capſule.

DIVISION I. BRITISH SPECIES.

Common Dodder.

Cuſcuta vulgaris.

This ſtrange plant conſiſts only of filaments, or long, tough threads, winding themſelves about other herbs, and here and there ornamented with flowers: it has no leaves, and has been ſuppoſed to have no root; but better obſervation will ſhew that to be an error.

Its firſt appearance, though little regarded, is on the ground.

Its root conſiſts of a few ſlender, long, and branched, redliſh fibres.

From theſe riſe ten or twelve ſtalks, in form of ſmall, red threads.

Theſe riſing in height, lay hold of ſome plant that is near them, and climb up on it: if there is none near, they pine, and the root dies with them; ſo the plant fading while ſmall, is not at all regarded. When there is a plant in the way, which is uſually the caſe, the young ſhoots riſing from ſeeds dropped from the old herb as it hangs

among the branches: theſe ſlender ſtalks grow quickly where they find themſelves ſupported, and entangle among one another, and among the ſhoots of the plant, to which they have faſtened themſelves in a ſtrange manner.

When they have got well eſtabliſhed there the root dies, the ſtalks that roſe from the ground wither, and the plant lives only among the branches of the other, taking its nouriſhment from them.

In this its full ſtate of perfection, the threads are purple, and as thick as a ſmall twine: and they ſoon after flower.

The flowers are produced in round cluſters on one ſide of the ſtalks; and are of a pale purpliſh colour, little and fleſhy. The ſeeds ripen in the ſame heads, and are large.

It is common in our fields and gardens, growing upon flax, nettles, heath, or any thing in its way, and often plaguing the gardener among his pot herbs: ſome have ſuppoſed the ſpecies of *dodder* differed according to the plant on which it grew, and have thence called it *epilinum* and *epurtica*, and by a variety of other names of the ſame kind. Among theſe none is ſo famous as *epithymum*, that is the *dodder* which grows on garden thyme, from which it has been ſuppoſed to imbibe peculiar virtues; but the *epithymum* or *dodder* of thyme is no way different from, nor any better than the *dodder* of the nettle when both grow in England: there is indeed a difference in that ſold at the druggiſts from our common kind, but this is not owing to its having grown on thyme, but to its having grown in Crete, where the ſun being warmer, raiſes it to more virtue.

C. Bauhine calls it *Cuſcuta major*. Others, *Cuſcuta*.

Dodder is a briſk purge, and is good in obſtructions of the viſcera, in the ſcurvy, and the ſciatica. In a ſmaller doſe it works by urine.

The beſt way of giving it is in infuſion, an ounce of the *dodder* to a pint of water.

Outwardly the freſh herb bruiſed is excellent againſt ſtrumous ſwellings.

Procumbent Dodder.

Cuſcuta humilis.

The common *dodder* ſpreads itſelf only over plants, this frequently lies upon the ground; though it will alſo run to a vaſt height upwards when there are trees or buſhes in the way to ſupport it.

The root is a cluſter of thick, very long and ſpreading fibres, brown, tough, and ill-taſted.

The ſtalks are numerous, and grow to a vaſt length: they are purple, round, and very tough.

They have no leaves, but are ornamented with a vaſt quantity of flowers: theſe are of a pale purple, and ſtand on foot-ſtalks.

It is a native of the American iſlands.

Gronovius calls it *Cuſcuta caule aphyllo volubili repente*. We, *American dodder*.

DIVISION II. FOREIGN SPECIES.

GENUS XXIII.

MUDWEED.

PLANTAGINELLA.

THE flower conſiſts of a ſingle petal divided deeply into five ſegments: the fruit is a capſule of an oval figure, half covered with the cup: it has only one cell, in which are numerous ſeeds: the cup is formed of a ſingle leaf, and is divided at the rim into five ſegments: the leaves grow ſingly, one on each foot-ſtalk, as do alſo the flowers.

Linnæus places this among the *didynamia angioſpermia*, becauſe of the four threads that are in every flower two are longer and two ſhorter; and the ſeeds are incloſed in a capſule: he has changed its known name *plantaginella* into *limoſella*. We are not fond of thoſe diminutive names derived from thoſe of other plants of different genera; but they are not needful to be changed without ſome farther reaſon.

Of this genus there is but one known ſpecies, and that is a native of Britain; a very ſingular, and very pretty plant.

Mudweed.

Plantaginella.

The root is a tuft of little, ſlender fibres.

From this riſe together a number of trailing ſhoots for propagation.

Theſe are procumbent: they run every way, and take root at little diſtances, ſending up numerous tufts of leaves.

The leaves riſe in cluſters of ten or twelve together: each is ſupported on a long, ſlender foot-ſtalk; and they are of the ſhape of the great water-plantain leaves, whence it had its name: they are of a pale green, broad, ſhort, and approaching to oval.

The flowers ſtand on ſeparate, and ſingle foot-ſtalks, not half ſo high as thoſe which bear the leaves; theſe are very ſmall and white.

The ſeed-veſſel is large and full of ſeeds.

It is common in the dry parts of ſhallow ſtagnant ponds: about Hounſlow it grows in almoſt every puddle. It flowers in July.

C. Bauhine calls it *Plantaginella paluſtris*. Plukenet, *Alſine paluſtris repens foliis lanceolatis*.

GENUS XXIV.

WINTERGREEN.

PYROLA.

THE flower conſiſts of a ſingle petal divided to the bottom into five or more ſegments; there is no tubular part, but theſe reſembling ſo many diſtinct petals, join only at the baſes: the fruit is a ſingle capſule after every flower; this is roundiſh, depreſſed, and ſlightly marked with ridges: the cup is very ſmall, it is divided into five ſegments, and remains with the capſule.

Linnæus places this among his *decandria monogynia*, the threads in the centre of the flower being ten, and the ſtyle riſing from the rudiment of the fruit ſingle; but he ſeparates ſome of the ſpecies.

DIVISION I. BRITISH SPECIES.

1. Round-leaved Wintergreen.

Pyrola foliis rotundis.

The root is long, ſlender, and furniſhed with numerous fibres.

The leaves riſe in a cluſter, and are very ſingular and pretty: they have long, ſlender footſtalks, and are of a roundiſh figure, ſomewhat approaching to oval, of a thick ſubſtance, and a freſh green colour: they are perfectly ſmooth, and divided at the edges: they in ſome degree reſemble the leaves of the pear-tree, but are ſmaller, and hence the genus had its Latin name, this being the firſt known kind; and that name is continued to the others, though their leaves have nothing of that form.

In the centre of this tuft of leaves riſes a ſingle ſtalk: this is round, firm, upright, and ten inches high: it has no leaves on it, except a few narrow membranes be called by that name; and at its top ſuſtains a ſpike of flowers.

Theſe are large, white, and very beautiful: they have numerous threads in the centre, and a long point, which is the ſtyle, riſes among them.

The ſeed-veſſel is large, and the ſeeds are numerous and ſmall.

It is not unfrequent in the woods of our northern counties, and flowers in Auguſt. We meet with it ſometimes in thoſe parts of boggy heaths which are deep covered with moſs.

C. Bauhine calls it *Pyrola major*. Others, *Pyrola*.

Our name of *wintergreen* is given it from the freſh appearance of the leaves at the moſt dead ſeaſons of the year, but it is a very indeterminate one, and has led to errors and confuſion. The late lord Petre, deſirous to have this plant, wrote into Yorkſhire for its ſeeds, and received what were called ſuch; they were nurſed with great care, and produced *wintercreſs Barbarea*. Such judges are gardeners of the Engliſh plants!

This ſpecies is greatly recommended as a vulnerary. They uſe it in Germany in all their wound-drinks, and in many of their ointments and plaiſters. With us the better knowledge of chirurgery has put theſe vulnerary plants much out of uſe.

2. Leſſer Wintergreen.

Pyrola minor.

The root is ſmall, long, and furniſhed with many fibres.

The leaves riſe twenty or more together, and are placed on ſhort and ſlender footſtalks: they are broad, of a roundiſh figure, and notched lightly on the edges.

The ſtalk is upright, round, and eight inches high, and toward the top it divides into ſeveral branches.

The flowers are large and white, and they ſtand in cluſters upon all the branches: they have a tuft of threads in the centre, as the other; but in that they lean, in this they ſtand upright, and the middle point or ſtyle is ſhort, not long and prominent as in that ſpecies.

The ſeed-veſſel is large, and the ſeeds are very numerous and very minute.

It is common in the northern parts of England, and flowers in July.

Rivinus calls it *Pyrola minor*. Others, *Pyrola Staminibus rectis*.

3. Tender Wintergreen.

Pyrola folio mucronato ſerrato.

The root is long, ſlender and creeping: it runs obliquely under the ſurface, and ſends out at ſmall diſtances tufts of fibres.

The firſt leaves, which riſe in numerous cluſters from different parts of the root, are oval: they ſtand on ſhort, ſlender footſtalks, and are of a deep green, and not at all ſerrated.

Among theſe riſe the ſtalks: they are round, ſlender, weak, and but ill ſupport themſelves in their hight, which is about a foot.

On the lower part of theſe there are ſome of thoſe ſhort, narrow, membranaceous leaves that are on the *common wintergreen* ſtalk; but beſides theſe, there are numerous other large and proper leaves.

The flowers grow at the top, and are large and white: they ſtand only on one ſide of the ſtalk when the plant is but moderately nouriſhed, but when the root ſpreads in a rich, free ſoil, they are more numerous, and ſtand on both ſides.

It is a native of the north of England, but not common there.

C. Bauhine calls it *Pyrola folio mucronato ſerrato*. Cluſius, *Pyrola ſecunda tenerior*; and his name is generally adopted by other writers.

4. Chickweed-flowered Wintergreen.

Pyrola alſines flore Europæa.

The root is compoſed of numerous threads connected to a ſmall head.

The firſt leaves are few and ſmall: they are

ſhort, ſerrated, ſharp-pointed, and have no footſtalks: they are of a yellowiſh green at firſt, and grow yellow and wither ſoon after the ſtalk appears.

The ſtalks are numerous, ſlender, ſtriated, and tolerably upright.

On the lower part they have ſeveral of thoſe ſmall, ſhort leaves mentioned in deſcribing the other ſpecies; but their proper leaves ſtand only at the top of each ſtalk, and riſe from one point.

Theſe are broad, ſhort, of a duſky green, ſerrated, and ſharp-pointed: there are ſix or eight of them on the top of every ſtalk, and they have no pedicles.

The flowers ſtand on very ſlender footſtalks riſing from the centre of the tuft of leaves; ſometimes there is only one flower on each footſtalk, ſometimes there are two or more: they are ſmall and white.

The ſeed-veſſel is large, and has ſeveral ridges, and the ſeed is large and brown.

It is found in the north of England among moſs and ruſhes in damp grounds; and flowers in Auguſt.

C. Bauhine calls it *Pyrola alſines flore Europæa.* J. Bauhine, *Herba trientalis.* Schwenkfeldt, *Alſine alpina*, alpine chickweed.

5. Braſilian Wintergreen.

Pyrola alſines flore braſiliana.

The root conſiſts of a ſmall head and a number of ſhort, white fibres.

The firſt leaves riſe in a little tuft, and are ſmall, ſhort, and without footſtalks: they juſt form a defence for the tender ſhoot of the ſtalk, for which purpoſe they ſeem to be intended by nature; and when that is riſen to a little height and ſtrength, they decay.

The ſtalk is round, ſlender, not very upright, and of a pale green.

The leaves ſtand in a cluſter at its top, riſing all from one point: they are large, oblong, broad, ſharp-pointed, not at all ſerrated at the edges, and of a pale green.

The flower is ſmall and white; often there is but one on the plant, ſometimes more: each is ſupported by a long, ſlender footſtalk, and is divided into five or more ſegments; for this diviſion is irregular.

The ſeed-veſſel is large and ſhort.

It is a native of America, but has been met with in ſome parts of England. Mr. Lawſon is recorded to have found it near Giſbury in Cleveland; and I have ſeen it in the hands of one who told me he brought it from Snowden-hill.

C. Bauhine calls it *Pyrola alſines flore braſiliana.*

No plants have more perplexed the writers on botany than thoſe of this genus; particularly theſe two laſt: but it has been becauſe neither they nor any of the others have fallen freſh into the hands of ſuch as could beſt have diſpoſed them.

Mr. Ray ſeparates the *pyrolæ* under two diſtinct claſſes, though he preſerves the uſual and received name *pyrola* to all of them: theſe two laſt alone he places in the preſent claſs of plants, that have the flower compoſed of a ſingle petal, and a ſingle capſule following it: the *common wintergreen* and the two kinds we have deſcribed after it he arranges among his claſs of pentapetalous flowers.

I am ſo unwilling to imagine he has been remiſs in that ſtrict examination which is neceſſary on theſe occaſions, that I rather think nature may vary a little in theſe tender points: the difference between a plant whoſe flower conſiſts of five ſeparate petals and one where it conſiſts of a ſingle petal divided to the bottom, the ſegments uniting only at the tips of the baſe, is ſo little, that it may not ſtrictly be obſerved in the courſe of nature, in which we ſee greater varieties. Certainly I have ſeen the flower of the *common pyrola*, where the petals uniting at their baſe were only the diviſions of one: this I have obſerved repeatedly, and not alone; and this is evidently the caſe in the two latter ſpecies: wherefore I have brought them here together.

As to Linnæus, he, though he regards not the continuity or diviſion of the parts of a flower as any part of claſſical character, yet for other reaſons ſeparates the *pyrola* more widely: the three firſt ſpecies here treated of he keeps together under the common name *pyrola*, but the two latter he divides from thoſe, and from one another, by ſeparate claſſes; the *European pyrola* he deſcribes in a diſtinct genus among his *heptandria*, calling its fruit a berry; though, as he allows it to have no juice, we ſhall be content to retain it here: the other he makes a ſpecies of *cornus*, the *dogberry*, placing it among the *tetrandria monogynia*, calling its fruit a drupe and not a capſule.

If a little liberty be to be taken in reſpect to the characters of plants, I think it ſhould be, not to ſeparate, but to keep thoſe of the ſame general form together.

DIVISION II. FOREIGN SPECIES.

1. Single-flowered Wintergreen.

Pyrola uniflora.

The root is ſmall, and creeps under the ſurface, ſending up tufts of leaves in ſpring in many places, and ſtalks where they have firſt riſen; but the leaves decay ſo ſoon that they are rarely ſeen together.

The ſtalks are round, ſlender, weak, and not at all branched.

The leaves grow regularly, but in a very ſingular manner: three riſe from every joint, and they all grow toward its top.

They are ſmall, roundiſh, a little ſerrated, and of a dark green: they have long footſtalks, and there uſually riſe ſome young leaves in their boſoms.

From the upper cluſter of theſe leaves riſes a ſlender, upright, weak pedicle, on which ſtands the flower.

This is large, white, and ſingle, and very much reſembles that of the parnaſſia, being larger than the flower of any other *pyrola:* it conſiſts of a ſingle petal, ſo deeply divided into five ſegments that they appear five diſtinct petals, joined only at their baſes.

The ſeed-veſſel is large and ribbed: the ſeeds are ſmall.

It is common in the woods of Sweden and ſome parts of Germany; and flowers in July.

Moriſon calls it *Pyrola ſingulari flore ampliore*. Linnæus, *Pyrola ſcapo unifloro*.

2. Shrubby Wintergreen.

Pyrola fruticoſa.

This is the moſt hardy of all the *Pyrolæ*.

Its root is long, ſlender, and woody, and runs under the ſurface, ſending up tufts of leaves and ſtalks in many places: theſe, when they have riſen to flowering, bend downward with the weight of the leaves, and, burying themſelves in the deep moſs among which they uſually grow, remain, and become as it were ſhrubby, ſending up young ſhoots another year.

The ſtalks are green, tender, and weak before they take this turn; afterwards they become harder, brown, and woody.

The leaves which riſe firſt are oblong, broad, ſerrated, of a browniſh green, and without footſtalks: they only appear, as the firſt ſhoot, and ſoon decay.

Thoſe on the branches are of the ſame form, and they uſually ſtand thick together: they are narroweſt at the baſe, broader toward the end, and have no footſtalks: they are of a pale green, and ſharply ſerrated.

The ſtalks terminate in long, naked pedicles, which divide into three or four leſſer at the top, and on each of theſe ſtands a ſingle flower: this is large, white, and compoſed of five ſegments, uniting at the baſe only; ſo that they ſeem five diſtinct petals.

The ſeed-veſſel is large, ſhort, and brown.

It is a native of Germany and of many parts of Aſia and America; and flowers in Auguſt.

C. Bauhine calls it *Pyrola fruticans arbuti folio*. Cluſius, *Pyrola tertia fruteſcens*.

3. Broad-leaved Wintergreen.

Pyrola folio latiore.

The root is long, ſlender, woody, brown, and ſpreading.

The firſt leaves are few and broad: they have ſhort footſtalks, and are not at all divided or ſerrated at the edges.

The ſtalks are numerous, firm, and round, but ſlender.

The leaves grow uſually three from the ſame part of the ſtalk, but this not uniformly or certainly: ſometimes there are two, ſometimes only one: they are large, broad, and not at all ſerrated: they have ſhort footſtalks; and their colour is a pale green.

The flowers are large, beautiful, and white: they grow with the ſame uncertainty as the leaves, ſometimes one, ſometimes two, and ſometimes three, on the ſame footſtalk.

The ſeed-veſſel is large, ribbed, and depreſſed.

It is common in the woods of North America, and flowers in June.

Gronovius calls it *Pyrola petiolis apice biſloris vel triſloris*. Petiver, *Pyrola marilandica minor folio mucronato arbuti*.

The virtues of theſe have not been tried, but the taſte ſhews them to be in general ſubaſtringent, as the common kind.

GENUS XXV.

MULLEIN.

VERBASCUM.

THE flower conſiſts of a ſingle petal, with a ſhort tubular part at the bottom, and divided deeply into five ſegments, which are uſually large and broad: the fruit is a ſingle capſule following every flower; this is of a ſhort, turbinated, or conic figure, and contains two cells: the cup is divided into five ſegments.

Linnæus places this among his *pentandria monogynia*; the threads being five in each flower, and the ſtyle riſing from the rudiment of the fruit ſingle.

DIVISION I. BRITISH SPECIES.

1. White Mullein.

Verbaſcum album.

This plant is named white, not from its flowers, for they are yellow, but from the ſingular whiteneſs of its leaves.

The root is long, large, divided, and furniſhed with a vaſt many fibres.

The firſt leaves are very large, numerous, and white: they have no footſtalks: they are a foot and half long, and half as much or nearly in breadth.

The ſtalk is firm, thick, upright, hard, and covered with leaves.

Theſe are of the ſame ſhape and colour with thoſe at the root, only they are ſmaller.

The flowers ſtand in a very long and thick ſpike at the top of the plant: they are not large, but are of a beautiful yellow.

The ſeed veſſel is large and brown.

It is common by way ſides, and flowers in July.

C. Bauhine calls it *Verbaſcum mas latifolium luteum*. Others, *Verbaſcum album*, and *Tapſus barbatus*. We call it *White mullein*, *Cows lungwort*, and in ſome places *High taper*.

2. Hoary white Mullein.

Verbaſcum pulverulentum album.

The flowers of this are yellow, as well as thoſe of the former, and it obtains its name in the ſame

ſame manner as that, from the whiteneſs of its leaves.

The root is long, thick, and furniſhed with many fibres.

The firſt leaves are long and large: they have ſhort footſtalks, and riſe in a large tuft: they are undivided at the edge, ſharp at the point, and very white; but they differ from thoſe of the other in this, that their whiteneſs is owing to a hoary powder, which is eaſily wiped off.

The ſtalk riſes in the centre, and is often eleven foot high.

The leaves ſtand irregularly on it, full as thickly as in the *common mullein*: they are like thoſe from the root, but ſmaller, and have the ſame kind of hoary, or duſty matter on them.

The flowers are ſmall and yellow: they ſtand in a thick ſpike at the top of the ſtalk, and they have the ſame ſort of white duſty matter about them as is on the leaves.

The ſeed-veſſels are large, and the ſeeds are very ſmall.

It is frequent in the weſtern counties of England, growing by road ſides, as the *common mullein*.

C. Bauhine calls it *Verbaſcum mas foliis anguſtioribus floribus pallidis*. J. Bauhine, *Verbaſcum pulverulentum flore luteo parvo*.

3. White-flowered Mullein.

Verbaſcum flore albo.

The root is long, large, and edged with many fibres.

The firſt leaves are very numerous and very large: they are narrower than in the *common mullein*, and very long; and they are on the upper ſide ſmooth, and of a blackiſh green; but white and hoary underneath.

The ſtalk is tall, firm, upright, and five foot high.

The leaves ſtand thick upon it, and are of the ſame ſhape with thoſe from the root, and in the ſame manner, of a dark green, and ſmooth on the upper ſurface, and white and duſty below: a few of the upper leaves are to be excepted, which are white all over.

The flowers ſtand on long branches, into which the ſtalk divides at the top; ſo that there are uſually many ſpikes in this, as there is commonly but one in the other *mullein*: they are ſmall and white.

The ſeed veſſel is large, and the ſeeds are very ſmall.

It is common by the road-ſides and in dry paſtures in many parts of Kent; and flowers in Auguſt.

C Bauhine calls it *Verbaſcum lychnitis flore albo parvo*. J. Bauhine, *Verbaſcum flore albo parvo*. Others, *Verbaſcum lychnitis*. Linnæus conſiders this as a variety of the former ſpecies, but it is really a diſtinct plant: if the colour of the flowers were the only difference it would be reaſonable to join them, but the leaves and the whole herb differ.

4. Black Mullein.

Verbaſcum nigrum.

The root is long, thick, and edged with many fibres.

The firſt leaves are large and broad: they have ſhort, purpliſh footſtalks, and are ſomewhat of the ſhape of the leaves of ſage, but vaſtly bigger: their colour is a blackiſh green: they are ſharply ſerrated, and they have an ill ſmell.

The ſtalks are round, thick, often rediſh, upright, and four or five feet high.

The leaves ſtand thick upon theſe, and reſemble thoſe which firſt riſe from the root, but that they are ſmaller.

Toward the top the ſtalk ſends out many branches, and theſe are all terminated by ſpikes of flowers, which are moderately large, of a beautiful gold gellow, and ornamented by purple buttons in the centre.

The ſeed-veſſel is large, ſmooth, and full of ſmall, brown ſeeds.

It is frequent in Hertfordſhire and many other counties by way ſides; and flowers in July.

C. Bauhine calls it *Verbaſcum nigrum flore ex luteo purpuraſcente*. Lobel, *Verbaſcum nigrum ſalvifolium*.

DIVISION II. FOREIGN SPECIES.

1. Low Cretick Mullein.

Verbaſcum humile Creticum foliis laciniatis.

The root is long, thick, and furniſhed with many fibres.

The firſt leaves are large, and they riſe in a thick tuft: they have long, hairy footſtalks, and are irregularly pinnated: they conſiſt each of two pairs of ſmall pinnæ, and a very large, roundiſh leaf at the end.

The ſtalks riſe among theſe; and are numerous, round, not very firm, and two feet high.

The leaves ſtand alternately on theſe; and are of the ſame ſhape with thoſe from the root, but ſmaller: ſome of them have the two pair of pinnæ, as thoſe of the root, and others only one pair, and the odd leaf.

The ſtalk divides into ſeveral branches toward the top, and on theſe ſtand the flowers in long ſpikes: they are large and yellow.

The ſeed-veſſel is large, and the ſeeds are ſmall.

It is a native of Crete, and flowers from June to September.

C. Bauhine calls it *Verbaſcum humile Creticum laciniatum*. Columna, *Verbaſcum braſſicæ folio*. Others make it a *blattaria*, but improperly. This is the ſpecies that ſome authors have called *arctus*, *arctos*, and *arcturus*.

2. Poppy-leaved Mullein.

Verbaſcum nigrum foliis papaveris.

The root is long, large, woody, and furniſhed with numerous fibres.

The firſt leaves are long, large, and hoary: they

Ladder

Plantaginella

Round leavd Winter Green

Tender Winter Green

Small flowerd Winter Green

Brasilian Winter Green

Single flowerd Winter Green

Shrubby Winter Green

Broad leavd Winter Green

White Mullein

Hoary White Mullein

White flowerd Mullein

Black Mullein

Yew Leavd Mullein

Poppy leavd Mullein

Moth Mullein

Purple Moth Mullein

Red Moth Mullein

Jagged Mullein

they are deeply ſinuated at the edges, in the manner of many of the *poppy* kinds, and are pointed at the ends.

The ſtalks are numerous, of a woody hardneſs, round, irregular in their growth, and ſpreading.

The leaves ſtand at diſtances on them, and are altogether unlike thoſe from the root: they are ſimple, of a cordated figure, and very white: they ſurround the ſtalk at the baſe, and terminate in an obtuſe point.

The flowers are large, and of a beautiful yellow.

The ſeed-veſſels are large and the ſeeds ſmall.

There is ſomething in the diſpoſition of the flowers in this ſpecies different from moſt of the others: they ſtand in a long, ſlender, and interrupted ſpike.

It is frequent in Italy, and flowers in July.

C. Bauhine calls it *Verbaſcum nigrum foliis papaveris corniculati.* J. Bauhine, *Verbaſcum criſpum et laciniatum.*

Mullein is a powerful reſtringent; and the common, white kind poſſeſſes the virtue in a greater degree than any other ſpecies.

The root dried and powdered is good in dyſenteries: fifteen grains for a doſe.

The juice of the leaves, boiled into ſyrup with honey, is excellent in coughs and other diſorders of the lungs.

The juice of the root, expreſſed with red wine, is good againſt overflowings of the menſes; and alone it is a ſovereign remedy in ſpitting of blood.

A pultice made of the tops and young leaves of *mullein* is excellent in the piles.

There are the authority of conſiderable names for recommending the expreſſed juice of *mullein* in the tympany. The plant deſerves a tryal in this caſe, which ſo often foils the beſt artiſt.

The other ſpecies probably poſſeſs the ſame virtues; but, it ſeems by their taſte, in a leſs degree.

GENUS XXVI.

MOTH MULLEIN.

BLATTARIA.

THE flower conſiſts of a ſingle petal, divided into five ſegments: the ſeed-veſſel is round, and the cup is divided into five ſharp ſegments.

Linnæus places this among the *pentandria monogynia*, but he does not allow it to be a diſtinct genus: he takes away its antient name, and makes it a ſpecies of *verbaſcum*. The Engliſh writers were ſenſible that it was nearly allied to *mullein* or *verbaſcum*, as appears by their naming it *moth mullein*; but it differs evidently in the figure of the ſeed-veſſel, which is round in this, and not in *mullein*.

The ſpecies of each of theſe genera are numerous; ſo that there is confuſion in joining them: too many of the botanical writers have confounded them already, calling ſeveral proper ſpecies of *verbaſcum*, *blattaria*, and thoſe of *blattaria*, *verbaſcum*: the eſſential diſtinction of the two genera being thus eſtabliſhed by the form of the capſule, I ſhall here ſeparate them, according to that character.

DIVISION I. BRITISH SPECIES.

Moth Mullein.

Blattaria vulgaris.

The root is long, large, divided into ſeveral parts, and hung with a multitude of fibres.

The firſt leaves are long, narrow, and of a ſhining green: they riſe without footſtalks, and ſpread circularly upon the ground.

The ſtalk riſes in the centre, and is round, firm, thick, upright, and two or three feet high.

The leaves ſtand irregularly on it: they are ſmall, and of the ſame ſhape and colour with thoſe from the root: they grow to the ſtalk by a broad baſe, and are ſharply ſerrated.

The flowers are very large and beautiful: they are of a gold yellow, and have purple buttons to the numerous threads in their centre.

The ſeed-veſſel is large, and the ſeeds are ſmall.

It is a wild plant with us, but not common. I have obſerved it near Denham in Buckinghamſhire. It flowers in Auguſt.

C. Bauhine calls it *Blattaria lutea folio longo laciniato.*

DIVISION II. FOREIGN SPECIES.

1. Purple Moth Mullein.

Blattaria purpurea.

The root is long and thick, divided, and hung with fibres.

The firſt leaves are large, numerous, and of an oval figure: they have ſcarce any footſtalks, and ſpread upon the ground.

The ſtalks are numerous, round, thick, firm, upright, and a foot and half high.

The leaves ſtand irregularly on them, and are ſhort, broad, of a dark green colour, and oval: they have no footſtalks, and ſometimes they are a little dented, ſometimes quite undivided at the edges.

The flowers ſtand in long ſpikes, and they are large, and purple: their colour varies from the deepeſt violet to the plaineſt red; and from this, which is altogether accidental, ſome have divided it into many diſtinct ſpecies.

The ſeed-veſſel is large and round, and the ſeeds are ſmall.

C. Bauhine calls it *Blattaria purpurea.* J. Bauhine, *Blattaria flore cærulco ſive purpureo.*

2. Red Moth Mullein.

Blattaria flore rubente foliis ſerratis.

The root is long, large, and furniſhed with many fibres.

The firſt leaves are numerous, large, and ſerrated: they are long, moderately broad, and have no footſtalks.

The ſtalk is round, thick, upright, firm, and three feet high.

The leaves ſtand irregularly on it, and are like thoſe from the root, long, large, deeply ſerrated, and ſharp-pointed: they have no footſtalks, and they generally hang downward.

The flowers ſtand at the top of the ſtalk in a very long and thick ſpike, with ſome long, narrow leaves intermixed among them: they are large, and of a beautiful mixed red, not a bright, gaudy colour, but an extreamly pleaſing tinct: when nearly examined there is a mixture of blue and of orange, but the red is the predominant colour.

The ſeed-veſſels are large and round.

It is a native of France, and flowers in Autumn.

Moriſon calls it *Blattaria perennis flore obſoleti coloris*; and others have in general copied the ſame name.

3. Jagged Moth Mullein.

Blattaria foliis diſſectis.

The root is long, ſlender, and furniſhed with many fibres.

The firſt leaves are numerous and ſmall: they riſe in a tuft, and ſpread on the ground like the rays of a ſtar: they have no footſtalks, and they are long, white, hoary, and deeply divided.

The ſtalks are numerous, round, ſlender, and about ten inches high.

The leaves ſtand thick upon them, and are hoary, white, and cut down to the middle rib in ſeveral places; ſo that they have a pinnated aſpect.

The flowers are ſmall, and the ſeed-veſſels alſo ſmall, but round.

It is a native of Italy, and flowers in June.

Boccone calls it *Blattaria imana multifida.* Others copy the ſame name.

The root of the *common moth mullein* is aſtringent, but in an inferior degree to that of the *common white mullein.* We have no account, from any authentick hand, of the virtues of the other ſpecies; but ſome of them have an acrid taſte, and ſeem of different qualities. They are accounted among the number of vulnerary plants in Germany; but almoſt every thing growing has in ſome places that character.

GENUS XXVII.

SPEEDWELL.

VERONICA.

THE flower conſiſts of a ſingle petal, which is tubular in the lower part, and divided into four ſegments at the edge: the fruit is a ſingle capſule, of a turbinated and heartfaſhioned ſhape, compreſſed at the top, and containing two cells: the cup is divided into four parts, and remains with the fruit.

Linnæus places this among his *dyandria monogynia*; the threads in the centre of the flower being two, and the ſtyle from the rudiment of the capſule ſingle.

DIVISION I. BRITISH SPECIES.

1. Little ſmooth Speedwell.

Veronica glabra parva.

The root is compoſed of numerous, ſlender, long fibres.

The ſtalks are weak, round, ſmooth, and numerous: they lie in part upon the ground, and in part raiſe themſelves up: they take root frequently where they trail upon the ground, and thence ſend up ſhoots that thicken the tuft: the part of the ſtalk that is erect is four or five inches high.

The leaves ſtand in pairs: they are little, of an oval figure, and of a pale but pretty green, perfectly ſmooth, and undivided at the edges.

The flowers are ſmall, and of a faint bluiſh white: they ſtand on ſhort footſtalks riſing from the boſoms of the leaves, and run up at the top of the ſtalks into a kind of looſe, irregular ſpike.

The ſeed-veſſel is ſmall and flat.

It is a native of every part of Europe, and in no country ſo frequent as in England; we have it every where by way-ſides and in paſtures. It flowers in May.

C. Bauhine calls it *Veronica pratenſis ſerpyllifolia.* Others, *Veronica pratenſis minor*, and *Betonica Pauli ſerpyllifolia.* In Engliſh it is called *Smooth ſpeedwell, ſmooth fluellin*, and *Paul's betony.*

There may be confuſion from the name of *fluellin*, becauſe it is the received Engliſh name of a very different plant, to be deſcribed in its place hereafter.

2. Little, hairy Speedwell.

Veronica mas ſupina et vulgatiſſima.

This is a ſmall *ſpeedwell*, as common in our paſtures as the other, and like it, often called by the common but improper name of *fluellin*: this confounds it with another genus, from which it is very diſtinct; as does alſo the common way of ſpeaking, with the former, but they differ widely.

The root of this is compoſed of a multitude of ſlender fibres, joined to a ſmall head.

The ſtalks that firſt ſhoot from it trail upon the ground, and take root at their lower ſide, by which means the plant preſently ſpreads into a large tuft.

From theſe procumbent ſhoots riſe the ſtalks which bear the flowers, as do alſo ſome from the root.

They are ſlender, weak, round, and of a pale green, five inches long, and, uſually, in part erect, and in part leaning.

The leaves grow in pairs: they are oblong, broad, deeply ſerrated, and ſharp-pointed: they have ſhort footſtalks, and they are of a pale green, and ſlightly hairy.

The flowers ſtand in long, ſlender ſpikes at the tops of the branches, and are of a beautiful blue, ſmall but very conſpicuous.

Under theſe ſpikes there frequently grow ſome narrow leaves, unlike thoſe on the reſt of the ſtalk.

The ſeed-veſſel is flatted and heartfaſhioned, and the ſeeds are numerous and ſmall.

This is very common in dry paſtures, and flowers in June.

C. Bauhine calls it *Veronica mas ſupina et vulgatiſſima.* J. Bauhine, *Veronica vulgatior folio rotundiore.*

We call it *Common ſpeedwell*, *male ſpeedwell*, and *male fluellin.* If we would call it *little*, *hairy ſpeedwell*, there would be no confuſion.

There is the more reaſon to aſcertain this ſpecies by ſome determinate Engliſh name, in that it is ſuppoſed to poſſeſs the greateſt virtue of any *ſpeedwell.*

There was an opinion very lately, that it was a cure for the gout, and the leaves, picked and dryed, ſold for three or four ſhillings a pound. The people who deal in them adulterated them with thoſe of the *germander-leaved ſpeedwell*, to be deſcribed hereafter, and by that means they loſt their credit, before it was found whether there were any foundation for the opinion of this great efficacy or not.

A decoction of the whole plant is a powerful diuretick and deobſtruent: it is good in jaundices and the beginning of dropſies.

A ſlighter tincture of it, drawn by infuſion, is a ſudorifick, and good in fevers.

Its juice, boiled into a ſyrup with honey, is excellent in aſthmas and other diſorders of the lungs; and uſed outwardly, in form of an ointment, it is good againſt the itch and other cutaneous diſorders.

The decoction of it made very ſtrong, and given as a glyſter with the common additions of oil and ſugar, is of prodigious efficacy in the tormenting pains of the nephritick cholick.

An infuſion of the leaves, drank in the manner of tea, is greatly recommended as a provocative to venery, and a ſtrengthener: it has been called a cure for barrenneſs, taken a long time in this manner.

To theſe virtues we are to add, that it is placed foremoſt by many writers in the claſs of vulneraries.

3. Germander-leaved Speedwell.

Veronica chamædryos folio.

The root is ſlender, and edged with fibres.

The firſt leaves are long, narrow, of a pale green, ſerrated, ſharp-pointed, and have no footſtalks.

The ſtalks riſe in the centre, and the leaves ſoon after fade.

They are ſlender and weak, but tolerably upright, and ſix or eight inches high.

The leaves ſtand in pairs, and are like thoſe from the root, but ſhorter and broader: they are of a pale green, ſharply ſerrated, and ſharp-pointed; and they have no footſtalks.

The flowers ſtand in long ſpikes riſing from the boſoms of the leaves; and they are of a very bright blue, large, and beautiful.

The ſeed-veſſels are heart-faſhioned, large, and flat.

It is common in paſtures, and flowers in July.

C. Bauhine calls it *Chamædrys ſpuria minor rotundifolia.* Ray, *Veronica chamædrys ſylveſtris dicta.* Others, *Chamædrys ſylveſtris.*

Our commom people call it *Blue tinker.*

They give the juice of it to children as a remedy for the rickets, and often with ſucceſs.

4. Short-leaved Germanderlike ſpeedwell.

Veronica chamædroyides foliis pediculis oblongis inſidentibus.

The root is a ſmall tuft of fibres.

From this grow many ſhoots, that trail upon the ground and take root in different places.

The ſtalks which ſupport the flowers riſe partly from theſe, and partly from the root: they are ſlender, weak, but imperfectly erect, and ten or twelve inches high.

The leaves ſtand in pairs, and do not grow to the ſtalk by their baſe, as in the laſt ſpecies, but ſtand on moderately long footſtalks; and theſe, and the mainſtalks alſo, are a little hairy: the leaves are ſhort, broad, and dentated, of a duſky green, and a little hairy.

The flowers ſtand on footſtalks riſing from the boſom of the leaves in a kind of looſe ſpikes, four, five, or ſix in each ſpike: they are ſmall, and of a faint blue.

The ſeed-veſſel is broad, flat, and heart-faſhioned at the end.

It is common in our woods, and flowers in Auguſt.

C. Bauhine calls it *Chamædrys rotundifolia ſcutellata.* Ray, *Veronica chamædroyides foliis pediculis oblongis inſidentibus.* Columna, *Alyſſon.* Dioſcoridis, *Montanum.* Our Engliſh writers call it *Mountain madwort.*

It is pretended that the juice is good againſt madneſs, but there is no authority for it.

5. Ivy-

5. Ivy-leaved Speedwell.

Veronica hederæ folio.

The root is a cluſter of ſmall fibres.

The firſt leaves are roundiſh, but indented into three, and ſometimes more diviſions: they riſe ſix or eight together, and have ſhort footſtalks.

The ſtalks are numerous, weak, and ſix or eight inches high.

The leaves ſtand alternately on them, and have footſtalks: they are divided deeply into three parts, and in ſome degree reſemble the leaves of ivy in miniature: their colour is a pale green, and they are hairy.

The flowers ſtand ſingly on ſhort footſtalks riſing from the boſoms of the leaves; and they are ſmall and bluiſh.

The ſeed-veſſels follow, and are heart-faſhioned: the ſeeds are numerous and ſmall.

It is common in corn-fields and in garden borders; and flowers in April.

C. Bauhine calls it *Alſine hederulæ folio.* Ray, *Veronica, floſculis ſingularibus hederulæ folio.* In Engliſh we call it *Small henbit*, or *Ivy-leaved chickweed.*

6. Chickweed-ſpeedwell with footſtalks.

Veronica floribus ſingularibus in oblongis pediculis.

The root is long, ſlender, and edged with many fibres.

The firſt leaves are ſhort and broad.

The ſtalks are numerous and weak; ſome trail upon the ground, and ſome ſtand erect, and they are five inches high.

The leaves ſtand alternate, and they have ſhort footſtalks: they are broad, ſhort, ſerrated, and ſharp-pointed, but of a dead green.

The flowers ſtand ſingly on footſtalks riſing from the boſoms of the leaves, and they are ſmall, and blue; ſometimes, but more ſeldom, white.

The ſeed-veſſel is large, and heart-faſhioned, and is flatted at the top.

It is common on walls and in dry places, and flowers early in ſpring.

C. Bauhine calls it *Alſine chamadryfolia floſculis pediculis oblongis inſidentibus.*

7. Chickweed-ſpeedwell, without footſtalks.

Veronica floribus ſingularibus caulibus adherentibus.

The root is compoſed of a multitude of fibres.

The ſtalk is round, weak, and very much branched.

The leaves ſtand in pairs without footſtalks, and are ſhort and broad, of a pale green, ſlightly ſerrated at the edges, and a little hairy.

The flowers ſtand in a long ſeries on the tops of the ſtalks and branches, and are ſmall and blue, ſtriated on the inſide, and uſually pale: theſe have no footſtalks, but grow to the ſtalk; and under theſe there grow alternately leaves of a different form from thoſe on the reſt of the plant: they are ſhort, oval, and not at all indented, and they ſomewhat reſemble the leaves of garden-thyme.

The ſeed-veſſel is flat and heart-faſhioned.

It is common on walls and in dry places, where it grows from two to five inches in height. It flowers in ſpring.

C. Bauhine calls it *Alſine foliis veronicæ, foliis et floſculis caulibus adherentibus.* Others, *Veronica foliis oppoſitis floribus ſeſſilibus.*

8. Fingered-leaved ſpeedwell.

Veronica foliis alternis digitatis.

The root is long, ſlender, and furniſhed with a great number of fibres.

The ſtalks are numerous, round, thick, of a pale green, partly erect, and in part procumbent, and three or four inches in height.

The leaves are numerous, and ſtand irregularly: they differ from thoſe of all the other ſpecies in ſhape, being divided in a fingered manner, ſome into three, and others into five parts. Thoſe toward the bottom of the ſtalk are divided into five parts, theſe are ſeparated down to the baſe in the manner of fingers; and the three middle diviſions are longer, the two outſide ones ſhorter; they are all narrow and pointed: the leaves on the upper part of the ſtalks are divided only into three parts each, and theſe, of the ſame form with the others: the lower leaves often fall off as the plant grows up; and the others only, or at leaſt principally, remaining and appearing as each compoſed of three ſeparate leaves, have occaſioned many to call it *trifoliate ſpeedwell.*

The flowers are large and purple: they ſtand on ſingle footſtalks riſing from the boſoms of the leaves, and make a pretty appearance.

The ſeed-veſſel is large, flat, and heart-faſhioned, and contains many ſmall ſeeds.

It is found in ſome of our northern counties in barren paſtures and in gravel-pits; and flowers in May.

C. Bauhine calls it *Veronica triphyllos cærulea.* Lobel, *Alſine parva recta folio alſines hederaceæ ruta modo diviſo.* Others *Alſine recta.*

9. Bugle-leaved Speedwell.

Veronica bugulæ folio ſubhirſuto.

The root is long, ſlender, and full of fibres.

The leaves that firſt riſe from it are large and oblong: they have ſhort footſtalks, and grow in a tuft, eight, ten, or more together.

Among theſe riſe the footſtalks, which are numerous, round, and ſomewhat hairy, and eight or ten inches high.

The leaves ſtand in pairs at diſtances, and are, like thoſe from the root, oblong, broad, and placed on ſhort footſtalks: they are crenated at the edges, and obtuſe at the end.

The flowers are large and blue: they ſtand in long ſpikes, ſometimes one, ſometimes three or more on the plant, according to its degree of nouriſhment.

The ſeed-veſſels are heart-faſhioned and flatted.

It is a native of Wales, and flowers in July.

It is deſcribed in the third edition of Ray's Synopſis under the name of *Veronica ſpicata Cambrobritannica bugulæ ſubhirſuto folio.*

10. Little

Little Smooth Speedwell

Little hairy Speedwell

Germander leaved Speedwell

Short leav'd Germander like Speedwell

Chickweed Speedwell with footstalks

Ivy leaved Speedwell

Chickweed Speedwell without footstalks

Fingered leav'd Speedwell

Bugle leav'd Speedwell

Little Spiked Speedwell

Broad leaved Spiked Speedwell

Narrow leaved Spiked Speedwell

Many Spiked leav'd Speedwell

Narrow Little leaved Speedwell

Great Germander Speedwell

Jagged leaved Speedwell

Large Flowered Speedwell

Dwarf Speedwell

Common Brookelime

Long leaved Brookelime

Narrow leav'd Brookelime

R. Benning Sculp

10. Little, ſpiked Speedwell.

Veronica Spicata minor.

The root is long, divided into many parts, and edged with fibres.

The firſt leaves are oblong, broad, and of a pale green: they riſe in a thick tuft, and frequently remain with the plant when in flower; whereas moſt of the others fade when the ſtalk riſes.

The ſtalk is round, ſlender, of a pale green, and tolerably upright.

The leaves ſtand in pairs, and are ſhort, little, and of a figure approaching to oval, but pointed at the ends: they have no footſtalks, and are of a dead green.

The flowers are ſmall and blue: they ſtand at the tops of the ſtalks in a thick, ſhort ſpike.

The ſeed-veſſels are deeply cordated, or heart-faſhioned.

It is not frequent in England, but has been found on Newmarket heath, Lincoln heath, and in ſome other places.

C. Bauhine calls it *Veronica ſpicata minor.* J. Bauhine, *Veronica ſpicata recta minor.* Others, *Veronica recta minima.*

Theſe ten are all the ſpecies of *ſpeedwell* that we have native in England. The brooklimes, of which we have three ſpecies, have been uſually ranged among theſe, and called by the ſame name, *veronica*; but they have their ſeparate name *becabunga*; their ſeparate virtues; and enough in their characters to diſtinguiſh them. I ſhall, therefore, arrange them diſtinctly in the next genus, after deſcribing thoſe foreign *ſpeedwells* which curioſity has introduced into our gardens.

DIVISION II. FOREIGN SPECIES.

1. Broad-leaved ſpiked *Speedwell.*

Veronica ſpicata latifolia.

The root is compoſed of numerous, large, and ſpreading fibres.

The ſtalk is round, upright, firm, and two feet high.

The leaves are oblong, broad, of a deep green, obtuſe at the end, and irregularly indented at the edges, often ſo ſlightly that it is ſcarce perceptible.

The flowers are ſmall, and of a pale blue, but they are very numerous, and ſtand in long, thick ſpikes.

The ſeed-veſſel is ſmall and heart-faſhioned, and the ſeed is very ſmall and brown.

It is frequent about the borders of foreſts in Germany, and flowers in July.

C. Bauhine calls it *Veronica ſpicata latifolia.* Others, *Veronica ſpicata major.*

2. Narrow-leaved ſpiked Speedwell.

Veronica ſpicata anguſtifolia.

The root is long, divided, and furniſhed with many fibres.

The firſt leaves are long, narrow, and have no footſtalks: they are of a duſky green, and riſe in a thick tuft.

The ſtalks are numerous, erect, firm, round, and a foot high.

The leaves ſtand in pairs, and are long, narrow, of a pale green, ſharp-pointed, and ſharply ſerrated.

The flowers are ſmall, and of a beautiful blue: they grow in long, thick ſpikes at the tops of the ſtalks.

The ſeed-veſſels are flat and heart-faſhioned: the ſeeds are ſmall and brown.

It is frequent in Italy, and flowers in July.

C. Bauhine calls it *Veronica ſpicata anguſtifolia.* Others, *Veronica erecta anguſtifolia.*

3. Many-leaved ſpiked Speedwell.

Veronica ſpicata foliis ternis quaternis aut quinis.

The root is long, divided, and full of fibres.

The ſtalks are numerous, round, firm, upright, and four or five feet high.

The leaves are long and conſiderably broad: they have no footſtalks, and they grow in an uncertain manner on the ſtalks, three, four, or five together; ſometimes, but more rarely, only two: they are ſharp-pointed and ſerrated.

The flowers are very numerous and white: they ſtand in a long ſpike at the top of the ſtalk, and frequently on others riſing from the branches.

The ſeed veſſels are heart-faſhioned, and the ſeeds are ſmall.

It is a native of America.

Plukenet calls it *Veronica Virginiana procerior foliis ternis, quaternis et etiam quinis caulem amplexantibus ſpicis florum caudidiſſimis.* Others, *Veronica altiſſima Americana.*

4. Narrow-leaved little Speedwell.

Veronica parva anguſtifolia.

The root is long, divided into many parts, and furniſhed with numerous fibres.

The ſtalks are numerous, round, upright, branched, and of a pale green.

The leaves ſtand alternately, and at conſiderable diſtances: they are long, narrow, of a bright green, and grow to the ſtalk without any footſtalks: they are undivided at the edges, and pointed at the end.

The flowers are ſmall and white: they grow in the boſoms of the leaves all the way up the ſtalks, and have no pedicles.

The ſeed veſſel is large and heart-faſhioned, and the ſeeds are ſmall and brown.

It is frequent in the corn-fields of France and Italy; and flowers in May.

Moriſon calls it *Veronica annua alba polygonifolio.*

5. Great Germander-leaved Speedwell.

Veronica chamædryos folio maxima.

The root is long, large, woody, and divided.

The ſtalk is firm, erect, of a woody hardneſs, and two feet high.

The leaves ſtand in pairs without footſtalks, and are of a very regular and beautiful ſhape: they

they are broadeſt at the baſe, ſmaller all the way to the point, and ſharply ſerrated.

The flowers are ſmall, and of a pale blue: they ſtand in long ſpikes, riſing from the boſoms of the leaves, and from the top of the ſtalk; and many of them uſually open together.

The ſeed-veſſel is heart-faſhioned, and not large.

It is a native of Germany, and flowers in July.

C. Bauhine calls it *Chamædrys ſpuria major altera ſive fruteſcens.*

6. Jagged-leaved Speedwell.

Veronica foliis laciniatis.

The root is long, ſingle, and furniſhed with a few fibres.

The ſtalk is firm, upright, a little hairy, a foot high, and is divided into ſeveral branches.

The leaves are numerous, and they are deeply and beautifully divided: their colour is a pale green, and they are a little hairy.

The flowers are ſmall and blue: they ſtand on ſhort footſtalks in a kind of looſe ſpikes.

The ſeed-veſſel is heart-faſhioned and ſmall; and the ſeeds are minute and brown.

It is a native of Italy and Germany, and flowers in June.

C. Bauhine calls it *Chamædrys auſtriaca foliis tenuiſſime laciniatis.* Moriſon, *Veronica tenuiſſime laciniata.*

7. Large-flowered little Speedwell.

Veronica pumila flore majore.

The root is compoſed of many long and ſlender fibres.

The ſtalks are numerous, round, weak, and four inches high.

The leaves ſtand uſually in pairs, though ſometimes they grow irregularly on the lower part of the ſtalks: they are ſmall, ſhort, without footſtalks, and ſharply ſerrated.

The flowers grow at the tops of the ſtalks in little tufts, and are large, and of a beautiful blue.

The ſeed-veſſels are heart faſhioned and ſmall.

It is a native of the mountainous parts of Italy.

C. Bauhine calls it *Chamædrys Alpina ſaxatilis.* Others, *Teucrium petræum pumilum.* Others, *Bonarota* and *Pæderota*, making it a diſtinct genus, but with little foundation in nature.

It is particular, that the leaves ſeem to have ſtood as the character of germander, with the old authors, rather than the flowers; for in germander thoſe are of the labiated kind.

8. Dwarf Speedwell.

Chamædrys pumila.

This is a very ſingular, and very pretty ſpecies.

The root is long, divided, and creeping.

The ſhoots are numerous from various parts, and they conſiſt each of a large cluſter of leaves, ſupported together on a ſhort, firm ſtalk.

Theſe are ſmall, oval, of a beautiful green, and finely ſerrated at the edges.

Among theſe riſe the ſtalks, which are minute, ſlender, and have no leaves. On their tops ſtand little cluſters of flowers, four or five on each, which are large in proportion to the plant.

The ſeed-veſſels are ſmall and heartfaſhioned.

It is common in the Pyrenean mountains, and flowers in ſpring.

C. Bauhine calls it *Veronica Alpina bellidis folio.*

GENUS XXVIII.

BROOKLIME.

BECABUNGA.

THE flowers conſiſt each of a ſingle petal, tubular at the lower part, and divided into four ſegments at the rim, and they ſtand in long ſpikes riſing from the boſoms of the leaves, not on the tops of the ſtalks: the ſeed-veſſel is heart-faſhioned. The ſtalks are thick and fleſhy, and the leaves ſtand in pairs.

Linnæus places this among his *diandria monogynia*; but he takes away its determinate and diſtinct name, making it a ſpecies of *veronica.*

The flowers and ſeed-veſſels indeed agree with thoſe of *veronica*; but as it is uſeful to diſtinguiſh the plants from one another; and nature has given ſufficient characters in the reſt of the herb, we ſhould therefore ſeek them there.

The determinations of this author, who is at preſent with many the oracle of botany, are not to be conſidered as ſo abſolute, with reſpect to joining and ſeparating the genera of plants, as ſome imagine. He frequently changes his own opinions; and to know what he has determined at preſent his laſt works muſt be ſeen. Thus, in the laſt ſpecies but one of the ſpeedwells, Micheli had ſeparated it from the reſt, and taken away its name *veronica*, making it a diſtinct genus, under that of *bonarota.* Linnæus, in his *Genera Plantarum*, followed this diviſion, eſtabliſhed the plant as a ſeparate genus; and, again changing the name, called it *pæderota:* but in his laſt publiſhed work he has again changed his opinion, and, deſtroying that new and idly founded genus, makes it a ſpecies of *veronica.* We give this as an inſtance, that the genera eſtabliſhed by Linnæus are not ſo irrevocable as ſome of his ſervile followers think; and as an excuſe for our ſometimes departing from them, for the ſake of utility.

There are but three known ſpecies of *brooklime*, and they are all natives of this country.

1. Common

1. Common Brooklime.

Becabunga vulgaris.

The root is long, ſlender, and creeping: it runs among the mud, and ſends out cluſters of fibres in many parts.

The ſhoots that firſt riſe from it are weak and ſlender: they often take root again as they lie upon the wet bottom.

The ſtalks are round, thick, fleſhy, of a pale green, and ten inches high.

The leaves ſtand in pairs, and have no foot-ſtalk: they are broad, ſhort, and lightly dentated at the edges.

The flowers are ſmall, but very numerous, and of a beautiful blue: they ſtand in long ſpikes which grow from the boſoms of the leaves; the top of the ſtalk being always terminated by a cluſter of young leaves, not by a ſpike of flowers.

The ſeed-veſſel is ſmall and heart-faſhioned: the ſeed minute and brown.

It is frequent in ſhallow waters, and flowers in June.

C. Bauhine calls it *Anagallis aquatica folio ſubrotundo.* He divides it into two ſpecies, under the name of a greater and leſſer; but theſe are only accidental varieties. Others call it *Veronica aquatica.*

2. Long-leaved Brooklime.

Becabunga longifolia.

The root is long, thick, and furniſhed with many fibres.

The ſtalk is round, very thick and fleſhy, upright, much branched, and a foot and half high.

The leaves ſtand in pairs: they are long, narrow, and ſerrated: they have no footſtalks, and are of a pale green.

The flowers are ſmall, and of a pale purple: they are very numerous, and ſtand in long ſpikes both on the main-ſtalk and the branches.

The ſeed-veſſel is heart-faſhioned, and the ſeeds are numerous and ſmall.

It is common in ſhallow waters, and about the ſides of ditches and rivers. It flowers from May to September.

C. Bauhine calls it *Anagallis aquatica minor folio oblongo.* Ray, *Veronica aquatica longifolia media.* Parkinſon deſcribes and figures it under the name of the *Leſſer water parſnip.*

3. Narrow-leaved Brooklime.

Becabunga anguſtifolia.

The root conſiſts of a few long, ſlender fibres.

The ſtalk is round, thick, fleſhy, and ten inches high, very little branched, and of a pale green.

The leaves ſtand in pairs: they are long, narrow, and not at all ſerrated, ſharp-pointed, of a deep green, and without footſtalks.

The flowers are few in number, of a pale purple, often white: they ſtand on long, ſlender footſtalks, and quickly fade.

The ſeed-veſſel is heart-faſhioned, broad, and flat.

It is not uncommon in watery places about woods. It flowers in June.

C. Bauhine calls it *Anagallis aquatica anguſtifolia ſcutellata.* J. Bauhine, *Anagallis anguſtifolia.*

Theſe three ſpecies have the ſame virtues; but the firſt or *common brooklime* is poſſeſſed of them in ſo much greater a degree, that it ought only to be uſed.

It is an excellent antiſcorbutick. Its juice, taken in ſpring, is one of the firſt of that claſs we uſually call ſweeteners of the blood. It may be given either alone or mixed with the juice of water-creſs and of Seville orange.

An infuſion of the whole plant is an excellent diuretick. It alſo promotes the menſes; and is good in the jaundice, and dropſies.

A freſh and tender leaf of *brooklime* laid on a ſlight wound heals it without any other application.

It is an old practice to mix *brooklime* leaves and cobwebs for this purpoſe; but the *brooklime* does alone.

A large quantity of this herb put into beer, while brewing, gives it the virtues of an antiſcorbutick and ſweetener of the blood in a very happy manner.

A pultice of it, boiled tender, is excellent in the piles.

SERIES II.

FOREIGN GENERA.

GENUS I.

TOBACCO.

NICOTIANA.

THE flower conſiſts of a ſingle petal, which is tubular, divided into five ſegments, and diſtinguiſhed by five folds at the rim: the ſeedveſſel is a ſingle capſule, of an oval figure, marked with a line on each ſide: the cup is divided into five ſegments, and remains with the fruit.

Linnæus places this among the *pentandria monogynia*; the threads in each flower being five, and the ſtyle riſing from the rudiment of the fruit ſingle.

they are broadeſt at the baſe, ſmaller all the way to the point, and ſharply ſerrated.

The flowers are ſmall, and of a pale blue: they ſtand in long ſpikes, riſing from the boſoms of the leaves, and from the top of the ſtalk; and many of them uſually open together.

The ſeed-veſſel is heart-faſhioned, and not large.

It is a native of Germany, and flowers in July.

C. Bauhine calls it *Chamædrys ſpuria major altera ſive fruteſcens.*

6. Jagged-leaved Speedwell.

Veronica foliis laciniatis.

The root is long, ſingle, and furniſhed with a few fibres.

The ſtalk is firm, upright, a little hairy, a foot high, and is divided into ſeveral branches.

The leaves are numerous, and they are deeply and beautifully divided: their colour is a pale green, and they are a little hairy.

The flowers are ſmall and blue: they ſtand on ſhort footſtalks in a kind of looſe ſpikes.

The ſeed-veſſel is heart-faſhioned and ſmall; and the ſeeds are minute and brown.

It is a native of Italy and Germany, and flowers in June.

C. Bauhine calls it *Chamædrys auſtriaca foliis tenuiſſime laciniatis.* Moriſon, *Veronica tenuiſſime laciniata.*

7. Large-flowered little Speedwell.

Veronica pumila flore majore.

The root is compoſed of many long and ſlender fibres.

The ſtalks are numerous, round, weak, and four inches high.

The leaves ſtand uſually in pairs, though ſometimes they grow irregularly on the lower part of the ſtalks: they are ſmall, ſhort, without footſtalks, and ſharply ſerrated.

The flowers grow at the tops of the ſtalks in little tufts, and are large, and of a beautiful blue.

The ſeed-veſſels are heart faſhioned and ſmall.

It is a native of the mountainous parts of Italy.

C. Bauhine calls it *Chamædrys alpina ſaxatilis.* Others, *Teucrium petræum pumilum.* Others, *Bonarota* and *Pæderota*, making it a diſtinct genus, but with little foundation in nature.

It is particular, that the leaves ſeem to have ſtood as the character of germander, with the old authors, rather than the flowers; for in germander thoſe are of the labiated kind.

8. Dwarf Speedwell.

Chamædrys pumila.

This is a very ſingular, and very pretty ſpecies.

The root is long, divided, and creeping.

The ſhoots are numerous from various parts, and they conſiſt each of a large cluſter of leaves, ſupported together on a ſhort, firm ſtalk.

Theſe are ſmall, oval, of a beautiful green, and finely ſerrated at the edges.

Among theſe riſe the ſtalks, which are minute, ſlender, and have no leaves. On their tops ſtand little cluſters of flowers, four or five on each, which are large in proportion to the plant.

The ſeed-veſſels are ſmall and heartfaſhioned.

It is common in the Pyrenean mountains, and flowers in ſpring.

C. Bauhine calls it *Veronica Alpina bellidis folio.*

GENUS XXVIII.

BROOKLIME.

BECABUNGA.

THE flowers conſiſt each of a ſingle petal, tubular at the lower part, and divided into four ſegments at the rim, and they ſtand in long ſpikes riſing from the boſoms of the leaves, not on the tops of the ſtalks: the ſeed-veſſel is heart-faſhioned. The ſtalks are thick and fleſhy, and the leaves ſtand in pairs.

Linnæus places this among his *diandria monogynia*; but he takes away its determinate and diſtinct name, making it a ſpecies of *veronica.*

The flowers and ſeed-veſſels indeed agree with thoſe of *veronica*; but as it is uſeful to diſtinguiſh the plants from one another; and nature has given ſufficient characters in the reſt of the herb, we ſhould therefore ſeek them there.

The determinations of this author, who is at preſent with many the oracle of botany, are not to be conſidered as ſo abſolute, with reſpect to joining and ſeparating the genera of plants, as ſome imagine. He frequently changes his own opinions; and to know what he has determined at preſent his laſt works muſt be ſeen. Thus, in the laſt ſpecies but one of the ſpeedwells, Micheli had ſeparated it from the reſt, and taken away its name *veronica*, making it a diſtinct genus, under that of *bonarota.* Linnæus, in his *Genera Plantarum*, followed this diviſion, eſtabliſhed the plant as a ſeparate genus; and, again changing the name, called it *pæderota*: but in his laſt publiſhed work he has again changed his opinion, and, deſtroying that new and idly founded genus, makes it a ſpecies of *veronica.* We give this as an inſtance, that the genera eſtabliſhed by Linnæus are not ſo irrevocable as ſome of his ſervile followers think; and as an excuſe for our ſometimes departing from them, for the ſake of utility.

There are but three known ſpecies of *brooklime*, and they are all natives of this country.

1. Common

1. Common Brooklime.

Becabunga vulgaris.

The root is long, ſlender, and creeping: it runs among the mud, and ſends out cluſters of fibres in many parts.

The ſhoots that firſt riſe from it are weak and ſlender: they often take root again as they lie upon the wet bottom.

The ſtalks are round, thick, fleſhy, of a pale green, and ten inches high.

The leaves ſtand in pairs, and have no footſtalk: they are broad, ſhort, and lightly dentated at the edges.

The flowers are ſmall, but very numerous, and of a beautiful blue: they ſtand in long ſpikes which grow from the boſoms of the leaves; the top of the ſtalk being always terminated by a cluſter of young leaves, not by a ſpike of flowers.

The ſeed-veſſel is ſmall and heart-faſhioned: the ſeed minute and brown.

It is frequent in ſhallow waters, and flowers in June.

C. Bauhine calls it *Anagallis aquatica folio ſubrotundo.* He divides it into two ſpecies, under the name of a greater and leſſer; but theſe are only accidental varieties. Others call it *Veronica aquatica.*

2. Long-leaved Brooklime.

Becabunga longifolia.

The root is long, thick, and furniſhed with many fibres.

The ſtalk is round, very thick and fleſhy, upright, much branched, and a foot and half high.

The leaves ſtand in pairs: they are long, narrow, and ſerrated: they have no footſtalks, and are of a pale green.

The flowers are ſmall, and of a pale purple: they are very numerous, and ſtand in long ſpikes both on the main-ſtalk and the branches.

The ſeed-veſſel is heart-faſhioned, and the ſeeds are numerous and ſmall.

It is common in ſhallow waters, and about the ſides of ditches and rivers. It flowers from May to September.

C. Bauhine calls it *Anagallis aquatica minor folio oblongo.* Ray, *Veronica aquatica longifolia media.* Parkinſon deſcribes and figures it under the name of the *Leſſer water parſnip.*

3. Narrow-leaved Brooklime.

Becabunga anguſtifolia.

The root conſiſts of a few long, ſlender fibres.

The ſtalk is round, thick, fleſhy, and ten inches high, very little branched, and of a pale green.

The leaves ſtand in pairs: they are long, narrow, and not at all ſerrated, ſharp-pointed, of a deep green, and without footſtalks.

The flowers are few in number, of a pale purple, often white: they ſtand on long, ſlender footſtalks, and quickly fade.

The ſeed-veſſel is heart-faſhioned, broad, and flat.

It is not uncommon in watery places about woods. It flowers in June.

C. Bauhine calls it *Anagallis aquatica anguſtifolia ſcutellata.* J. Bauhine, *Anagallis anguſtifolia.*

Theſe three ſpecies have the ſame virtues; but the firſt or *common brooklime* is poſſeſſed of them in ſo much greater a degree, that it ought only to be uſed.

It is an excellent antiſcorbutick. Its juice, taken in ſpring, is one of the firſt of that claſs we uſually call ſweeteners of the blood. It may be given either alone or mixed with the juice of water-creſs and of Seville orange.

An infuſion of the whole plant is an excellent diuretick. It alſo promotes the menſes; and is good in the jaundice, and dropſies.

A freſh and tender leaf of *brooklime* laid on a ſlight wound heals it without any other application.

It is an old practice to mix *brooklime* leaves and cobwebs for this purpoſe; but the *brooklime* does alone.

A large quantity of this herb put into beer, while brewing, gives it the virtues of an antiſcorbutick and ſweetener of the blood in a very happy manner.

A pultice of it, boiled tender, is excellent in the piles.

SERIES II.

FOREIGN GENERA.

GENUS I.

TOBACCO.

NICOTIANA.

THE flower conſiſts of a ſingle petal, which is tubular, divided into five ſegments, and diſtinguiſhed by five folds at the rim: the ſeedveſſel is a ſingle capſule, of an oval figure, marked with a line on each ſide: the cup is divided into five ſegments, and remains with the fruit.

Linnæus places this among the *pentandria monogynia*; the threads in each flower being five, and the ſtyle riſing from the rudiment of the fruit ſingle.

1. Broad-leaved Tobacco.

Nicotiana latifolia.

The root is long, thick, divided into many parts, and furniſhed with fibres.

The ſtalk is round, thick, firm, erect, divided into a few branches, and ſix feet high.

The leaves are very large, long, and broad: they have no pedicles, but ſurround the ſtalk in great part at their baſe, and are of a deep green, and divided at the edges: they ſtand irregularly, and are very numerous.

The flowers grow on ſlender and long footſtalks at the tops of the branches and of the mainſtalk: they are very large, and of a beautiful red: they are long, tubular, and narrow at the bottom.

The ſeed-veſſel is large, and the ſeeds are numerous.

It is a native of America. The Europeans became acquainted with it about two hundred years ſince; and from that time the demand has been ſo great for the dryed leaves that it is one of the principal articles of the traffick of that part of the world.

C. Bauhine calls it *Nicotiana major latifolia.* Others, ſimply, *Nicotiana* or *Petum* and *Tabacum.*

2. Narrow-leaved Tobacco.

Nicotiana anguſtifolia.

The root is long, thick, divided into many parts, and furniſhed with numerous fibres.

The ſtalk is round, firm, erect, and four feet high, very little branched, and ſomewhat hairy.

The leaves ſtand alternately, and have no footſtalk, but in part encloſe the ſtalk at the baſe: they are very long and narrow: they are undivided at the edge, and ſharp pointed.

The flowers are ſmaller than thoſe of the former, but in themſelves conſiderably large: they are of a faint red, long, tubular, and divided at the edge.

The ſeed-veſſel is large, and the ſeeds are numerous.

It is a native of America, as the other, and flowers, with it, in June and July.

C. Bauhine calls it *Nicotiana major anguſtifolia.*

3. Short leaved Tobacco.

Nicotiana folio brevi.

The root is long, thick, divided into many parts, and furniſhed with numerous fibres.

The ſtalk is round, thick, hairy, and three feet high.

The leaves ſtand irregularly, and are broader and ſhorter than thoſe of the common kind, and more hairy: they do not encloſe the ſtalk at the baſe, as thoſe do, but ſtand on pedicles, which are alſo hairy.

The flowers ſtand upon long, ſlender footſtalks at the top of the ſtalk and branches, and they are ſmall, and of a greeniſh colour, with a tinge of yellow.

The ſeed-veſſel is large, and the ſeeds are numerous.

It is a native of South America, and flowers in July.

C. Bauhine calls it *Nicotiana minor.*

4. Dwarf Tobacco.

Nicotiana minima.

The root is long, ſlender, ſimple, and furniſhed but with few fibres.

The leaves are numerous, oblong, broad, and placed on long footſtalks.

They are pointed at the end, and not at all ſerrated at the edges, of a fleſhy ſubſtance, and of a duſky green.

The flowers are ſmall, but of a beautiful red: they ſtand on ſlender ſhort footſtalks riſing from the boſoms of the leaves.

The ſeed-veſſel is large, and the ſeeds are numerous.

It is a native of South America, and flowers in July.

C. Bauhine calls it *Nicotiana minima.*

All theſe ſpecies have the ſame virtues, but the firſt kind has them in the greateſt degree.

It is a rough and violent emetic taken internally.

The freſh leaves are greatly recommended againſt pain.

The uſe of them, dried in form of tobacco for ſmoaking, and ſnuff for taking up the noſtrils, is grown univerſal. It might either way be of great ſervice as a medicine when required; but the frequent taking of it in wantonneſs is unhealthful.

GENUS II.

THORNAPPLE.

STRAMONIUM.

THE flower conſiſts of a ſingle petal, tubular, deep, and folded in five parts at the rim: the ſeed-veſſel is of an oval figure, and contains two cells: the cup is oblong, tubular, bellied; marked with five ribs, and divided into five ſegments.

Linnæus places this among his *pentandria monogynia*; the threads in each flower being five, and the ſtyle riſing from the rudiment of the fruit ſingle.

He has, however, taken away the common received name *ſtramonium*, and calls the genus *datura.*

1. Common Thornapple.

Stramonium vulgare.

The root is long, large, divided into ſeveral parts, and furniſhed with many fibres.

The ſtalk is thick, firm, upright, of a pale green, and two foot and a half high.

The leaves are large, broad, beautifully indented, and placed on firm footſtalks: they are of a lively green, ſharp-pointed, and broadeſt toward

toward the baſe: they ſtand iregularly, and are of a firm texture.

The flowers grow at the diviſions of the branches, and are very large, and of a ſnow white, long, tubular, and hollow.

The ſeed-veſſel is of an oval figure, and of the bigneſs of a walnut: it is covered with ſhort, ſharp prickles.

The ſeeds are large and brown.

Many inſects are fond of the fleſhy part of this ſeed-veſſel; ſo that, when it has hung ſome time on the plant, it is not uncommon to ſee it eaten away between the ſolid parts, which then remaining entire, bleach in the air, and ſhew its ſkeleton.

It is a native of the ſouthern parts of America, and flowers in Auguſt.

C. Bauhine calls it *Solanum ſativum fructu ſpinoſo oblongo flore albo*. Others, *Stramonium*, and *Datura fructu ovato*.

2. Round Thornapple.

Stramonium fructu rotundo.

The root is long, thick, divided, and ſpreading.

The ſtalk is round, firm, thick, and two feet high.

The leaves are numerous, and of a ſtrong green.

They ſtand irregularly, and are of a heart-like figure, only not indented: they are broadeſt at the baſe, and all the way ſmaller to the point, and they have long footſtalks: they are ſomewhat waved, but not indented at the edges.

The flowers riſe from the boſoms of the leaves and at the inſertions of the branches, and they are large, long, hollow, and white.

The fruit is round, prickly, and of the bigneſs of a cheſnut.

It is a native of Africa and Aſia, and flowers in July.

C. Bauhine calls it *Solanum fructu parvo ſpinoſo rotundo longo flore*. Others, *Metel*.

3. Small-fruited Thornapple.

Stramonium fructu minore.

The root is large, divided, and ſpreading.

The ſtalks are numerous, woody, firm, and four yards high: they are irregular in their growth, and very much branched.

The leaves ſtand on long footſtalks, and are of a beautiful green: they are oblong, and very deeply divided into a kind of broad, ſharp-pointed ſegments.

The flowers are numerous, large, and beautiful: they riſe from the ſtalks near the inſertions of the leaves, and have ſhort pedicles: they are purpliſh on the outſide, white as ſnow within, and divided at the edge into ſegments, which terminate in a kind of tails.

The fruit is round, and of the bigneſs of a cobnut: it is ſometimes covered with ſlight, ſoft prickles, and ſometimes only rough on the ſurface. The flower alſo is frequently double.

It is a native of Egypt and ſome parts of the eaſt; and flowers in Autumn.

C. Bauhine calls it *Solanum fœtidum*; *fructu ſpinoſo rotundo ſemine pallido*.

The leaves have an ill ſmell; but the flowers are ſweet.

Alpinus calls it *Datura contrarena*. Others, *Datura*, the name Linnæus gives the genus.

The ſeeds of the *common thornapple*, taken inwardly, diſturb the brain, and bring on a kind of madneſs.

Externally uſed, when freſh gathered and bruiſed, they are extolled greatly for the cure of the herpes.

An ointment of the leaves is alſo cooling.

The root, dryed and powdered, may be given as an opiate: five or ſix grains for a doſe. It alleviates pain, and procures reſt.

The virtues of the plant are the ſame with thoſe of opium, but it has them in a more violent and unmanageable degree.

GENUS III.

MOUNTAIN SANICLE.

CORTUSA.

THE flower conſiſts of a ſingle petal, tubular a little way at the bottom, and divided into five ſegments at the edge: the fruit is a ſingle capſule, of an oblong, oval figure, pointed, and furrowed: the cup is very ſmall, but divided into five open ſegments, and remains with the ſeed-veſſel.

Linnæus places this among the *pentandria monogynia*; the threads in the centre of the flower being five, and the ſtyle from the rudiment of the capſule ſimple.

1. Alpine Cortuſa.

Cortuſa alpina.

The root is compoſed of numerous long and ſlender fibres.

The leaves riſe in a thick cluſter: they are ſupported on long footſtalks, and are broad, roundiſh, and deeply divided into ſegments, which are again ſerrated at their edges.

They are of a dark green on the upper and under ſide, and of an acrid taſte.

Among theſe riſe ſeveral ſtalks, which are round, ſlender, rediſh, naked, and ſix inches high: they are uſually rediſh toward the bottom, and pale at the top.

The flowers are moderately large, and of a beautiful ſtrong red: they grow in a tuft at the top of the ſtalk, in the manner of the auricula

or cowſlip, ten or twelve together, on ſlender, long footſtalks, riſing from the ſame point at the top of the main ſtalk.

The ſeed-veſſel is oblong, and furrowed lengthwiſe; and the ſeeds are numerous and ſmall.

It is a native of Germany, and flowers in July.

C. Bauhine calls it *Sanicula montana latifolia lacinata*. The common writers, *Curtuſa*, and *Cortuſa mathioli*. Cluſius, *Suniucla alpina*.

It is one of the famous wound-herbs of the Germans; but its virtues are not eſtabliſhed by any known experience.

GENUS IV.

BEARS EAR.

AURICULA.

THE flower conſiſts of a ſingle petal, tubular in the lower part, and divided into five broad ſegments: the ſeed-veſſel is ſingle and oblong, and the cup is very ſhort, and divided into five ſegments: the leaves are fleſhy.

Linnæus places this among the *pentandria monogynia*, the threads in the flower being five, and the rudiment of the capſule and its ſtyle ſingle: but he denies it to be a particular genus. He conſiders it as a ſpecies of cowſlip. But from that genus it palpably differs in the ſhortneſs of the cup, and the fleſhy ſubſtance of the leaves.

He thus takes away its uſual and received name *auricula*; a name we have introduced into our own language, though we in general pronounce it ill: the proper name of this plant *bears ear* being neglected. Our gardeners preſerve the word *auricula*; but they ſpeak it *riculas*.

1. Common yellow Auricula.

Auricula vulgaris lutea.

The root is compoſed of a great many thick fibres, which ſpread every way, and penetrate deep.

The leaves riſe in a little cluſter ſix or eight together.

They are broad, oblong, of a whitiſh colour, lightly ſerrated at the edges, and of a thick, fleſhy ſubſtance.

The ſtalk is round, thick, four or five inches high, and naked.

The flowers are large, open, and beautiful: they ſtand in a little cluſter at the top of the ſtalk, each having its own ſeparate footſtalk. Their colour is yellow; but in this there is great variety. In nature it is of all the degrees of yellow, from the deepeſt to the paleſt, and to abſolute white; and culture introduces variegations of many more kinds.

It is a native of Switzerland, and other of the northern parts of Europe, and flowers in June.

C. Bauhine calls it *Sanicula Alpina lutea*. J. Bauhine, *Auricula urſi flore luteo*.

Many of the *auriculas* deſcribed as diſtinct ſpecies by authors, are no other than varieties of this plant riſing from culture: but Linnæus is raſh in making all thoſe we ſee of that kind.

There are three diſtinct and original ſpecies of this genus; from theſe three, culture has raiſed all that amazing and beautiful variety we ſee in gardens; but not from this one.

2. Narrow-leaved red Auricula.

Auricula anguſtifolia flore rubente.

The root is compoſed of numerous, long, and ſlender fibres.

The leaves riſe in a ſmall tuft ten or twelve together, and have no footſtalks: they are long, narrow, of a deep green, more or leſs covered with a greyiſh duſt, ſharp-pointed, and ſerrated at the edges.

The ſtalk is three inches high, thick, naked, round, and of a pale colour.

The flowers ſtand in a cluſter at the top, and are large, and of a bright red: each has its ſeparate long footſtalk, and they ſtand very upright.

The ſeed-veſſel is oblong, and the ſeed minute.

It is a native of the Apennines. I have ſpecimens of it collected in its wild ſtate there, which ſhew it a perfectly diſtinct ſpecies; as is alſo the next to be deſcribed. There is no judging by what one ſees in gardens, where the accidents occaſioning varieties are endleſs: but in theſe collected wild there is no error.

C. Bauhine calls this *Sanicula Alpina anguſtifolia*. J. Bauhine, *Auricula urſi anguſtifolia colore rubente*. We, *Red auricula*.

3. Round-leaved red Auricula.

Auricula foliis ſubrotundis flore rubente.

The root conſiſts of a ſmall head, and a great multitude of fibres.

The leaves are numerous and erect: they ſtand on a kind of footſtalks; but thoſe are rather a continuation of the baſe of the leaf, than any thing regularly demanding that name: they are ſhort, broad, roundiſh, and of a pale green: they are obtuſe, and ſharply ſerrated, and of a thick, fleſhy ſubſtance.

The ſtalk riſes in the centre, and is thick, firm, upright, naked, and about four inches high.

The flowers are large, and of a beautiful red: they ſtand in a tuft at the top of the ſtalk, each having its ſeparate and proper footſtalk.

The ſeed veſſel is oblong, and the ſeed is ſmall.

It

It is a native of Germany and Switzerland, and flowers in June.

C. Bauhine calls it *Sanicula Alpina rotundifolia.*

4. Long-leaved Auricula.

Auricula foliis oblongis integerrimis.

The root is a bunch of thick fibres, riſing from a ſmall oblong head.

The leaves are numerous, and they riſe in a thick cluſter: they are long, narrow, ſharp-pointed, and undivided at the edges: they have no footſtalks: their colour is a bright gloſſy green on the upper-ſide, and paler underneath.

The ſtalk riſes in the centre of the tuft, and is four inches high.

The flowers grow in a ſmall tuft at the top; often there are but two or three, rarely more than five: they are large, and irregularly divided into ſegments, which are deeply cut in, and pointed in the diviſions: the cup is tubulous and obtuſe.

It is a native of Switzerland, and flowers in May.

C. Bauhine calls it *Sanicula Alpina rubeſcens folio non ſerrato.* Others, *Auricula longifolia.*

5. Dwarf Auricula.

Auricula pumila.

The root is long, ſlender, and furniſhed with numerous fibres.

The leaves riſe in a cluſter, and are very ſmall: they have no footſtalks, and they are of a very ſingular ſhape, narroweſt at the bottom, broadeſt at the top, and there deeply indented: the outer leaves of theſe little cluſters are ſmalleſt, and the inner ones longeſt and largeſt, and of the freſheſt green.

The ſtalks riſe among theſe; and are round, ſlender, ſhort, and very minute, like the reſt of the plant.

The flowers are large, and very beautiful: they are of a ſnow-white ſometimes, and ſometimes they have a bluſh of rediſh. One commonly ſtands on each ſtalk.

The ſeed-veſſel is oblong, and the ſeeds are very minute.

It is a native of Germany, and flowers in April.

C. Bauhine calls it *Sanicula Alpina minima carnea.* Others, *Auricula urſi minima.*

GENUS V.

NAVELWORT.

ANDROSACE.

THE flower conſiſts of a ſingle petal, which is tubular, and of an oval form in the lower part, and is divided into five ſegments at the edge.

The ſeed-veſſel is a ſingle, round capſule, having only one cell, and opening at the top: the cup is formed of one piece, pentangular, and divided into five ſegments.

Linnæus places this among the *pentandria monogynia*, the threads in the flower being five, and the ſtyle from the rudiment of the capſule ſingle.

1. Great Navelwort.

Androſace major.

The root is long, ſlender, and has few fibres.

The leaves riſe in a thick tuft; and are large, oblong, and ſharply ſerrated: they have no footſtalks; they are of a pale green; and they are ribbed lengthwiſe, in the manner of plantain leaves.

In the centre of this tuft riſe the ſtalks: they are numerous, weak, ſlender, naked, and about ſeven inches high: commonly of a pale green, but often purpliſh.

The flowers are ſmall and white: they ſtand at the tops of the ſtalks in little tufts, after the manner of thoſe of the cowſlip or auricula, each on its own long footſtalk.

The ſeed-veſſels follow, and are round and large.

At the top of the ſtalk, where the flower-ſtalks riſe, there is a ſmall cluſter of little leaves, which may be called a general cup.

It is common in the corn-fields of Germany, and flowers in Auguſt.

C. Bauhine calls it *Alſine officiis androſace dicta major.* Others, *Androſace Mathioli major.*

2. Hairy Navelwort.

Androſace villoſa.

The root is long, ſlender, tough, divided into many parts, and covered with a blackiſh bark.

The leaves riſe in round tufts: they are numerous, very ſmall, and oblong: they have no footſtalks: their colour is a pale green, and they are very hairy.

The ſtalks riſe in the centre of theſe tufts of leaves, one uſually from each: they are ſmall, ſlender, hairy, weak, and about three inches high.

There are no leaves on theſe, except a few at the top, which form a kind of general cup for the flowers.

From the ſummit of the ſtalk, where the leaves grow, riſe alſo ten or a dozen ſhort pedicles, each ſupporting a ſingle flower: theſe are large for the bigneſs of the plant; and are either white, or of a beautiful pale red.

The ſeed-veſſel is large and round.

It is a native of the Pyrenæan mountains, and flowers in ſpring.

Authors have not well known where to place it.

C. Bauhine calls it *Sedum Alpinum hirſutum lacteo flore* J. Bauhine, *Chamejaſme Alpina.* Others, *Sedum Alpinum villoſum.*

3. Narrow-leaved Navelwort.

Androſace anguſtifolia.

The root is ſmall, long, divided, and furniſhed with a few fibres.

The leaves are long and narrow: they riſe in cluſters, ſeveral from one root; ſo that the firſt appearance of the plant is a complicated tuft: they are of a pale green, ſmooth on the ſurface, and undivided at the edges.

The ſtalks riſe from the centre of theſe tufts, and are weak, ſlender, and naked; except that they have ſometimes a little membrane, ſometimes two or more, juſt where the footſtalk of the flower ſprings.

The flower is large and white; ſometimes there is one grows on a ſtalk, ſometimes there are more.

The ſeed-veſſel is large and round, and the ſeeds are numerous and ſmall.

It is a native of the mountainous parts of Auſtria, and flowers in ſpring.

C. Bauhine calls it *Sedum Alpinum gramineo folio lacteo flore*.

4. Sharp leaved Navelwort.

Androſace foliis acuminatis.

The root is long, ſlender, fibrous, and black.

The leaves riſe in little cluſters, and ſpread themſelves in a round form: they are narrow, of a deep green, ſmooth, and ſharp pointed: they are broadeſt at the baſe, where they adhere to the top of the root; they thence grow ſmaller to the point, and they have no footſtalks: there riſe ſeveral long ſhoots among theſe cluſters of leaves, that lie on the ground, and take root as they ſpread; and others that raiſe themſelves upwards.

The ſtalk that ſupports the flowers is naked two or three inches high, and of a whitiſh green.

The flowers are large, and of a pale fleſh colour: they are placed on ſhort pedicles, eight or ten of which riſe from the top of the ſtalk.

The ſeed-veſſel is round and large: the ſeeds are numerous, and ſmall.

It is a native of Switzerland, and flowers in May.

C. Bauhine calls it, *Sedum alpinum anguſtiſſimo folio flore carneo.*

The virtues of theſe plants are unknown.

GENUS VI.

MOUNTAIN BINDWEED.

SOLDANELLA MONTANA.

THE flower conſiſts of a ſingle petal, which is tubular at the bottom, and expanded and divided into five deep, narrow, and, as it were, ragged ſegments at the edge.

The ſeed-veſſel is long and pointed, and the cup is divided into five ſegments.

Linnæus places this among the *pentandria monogynia*; the threads being five in each flower, and the ſtyle from the rudiment of the capſule ſingle.

The generality of authors have joined it with the common *ſoldanella*; but it differs from that by obvious characters, and plainly is a plant of its own kind, and of a peculiar genus.

I have avoided the error of confounding it with the other, but have retained its antient name, that it may be known at once here.

Linnæus, ſtudying critical exactneſs more than utility, gives the name of *ſoldanella* to this plant alone; making the other a ſpecies of *convolvulus*; and ſuch it properly is. While its diſtinct name was given to no other plant there could ariſe no error from that practice; but the ſtudent will not find in this herb the virtues recorded of *ſoldanella*: he is therefore to know this only with the addition of an epithet; and is to underſtand ſtill, that the ſingle word *ſoldanella* belongs to the other; not to this plant.

Of this genus there is but one known ſpecies.

Mountain Bindweed.

Soldanella.

This is not the only plant called *bindweed*, which has not a winding ſtalk: the name was firſt given to ſome of the ſpecies that had; and afterwards continued to ſuch as had not.

The root of this is long and furniſhed with many fibres: it runs obliquely under the ſurface, and ſpreads greatly.

The leaves riſe in a large cluſter, and ſtand on long, rediſh footſtalks: they are ſmall, roundiſh, and ſmooth.

The ſtalks riſe among theſe, and are round, thick, eight inches high, and naked.

The flowers grow at the tops in a kind of tuft, four, five, or more together: they have each its own ſeparate footſtalk, and ſpread out in the manner of cowſlips.

The ſeed-veſſels are large and long, and the ſeeds are ſmall and brown.

It is a native of the Pyrenæan mountains.

Its virtues are not known.

Broad leavid Tobacco

Narrow leavid Tobacco

Short leavid Tobacco

Dwarf Tobacco

Common Thorn Apple

Round Thorn Apple

Small fruited Thorn Apple

Upine Cornuta

Common Auricula

Narrow red leavid Auricula

Round leavid Auricula

Long leavid Auricula

Common Auricula

Broad leavid Navelwort

Narrow Navelwort

Narrow leavid Navelwort

Sharp leavid Navelwort

GENUS VII.

SOWBREAD.

CYCLAMEN.

THE flower conſiſts of a ſingle petal, formed into a rounded tube at the bottom, and at the rim divided into five ſegments that turn upwards: the fruit is a ſingle ſeed-veſſel of a rounded form, in ſome degree reſembling a large berry, but opening into five parts at the top: the cup is rounded, and divided at the edge into five ſegments.

Linnæus places this among the *pentandria monogynia*; the threads in each flower being five, and the ſtyle from the rudiment of the fruit ſingle.

Mr. Ray, who is not exempt from errors, places it among the *herbæ bulboſis affines*; of which we ſhall ſpeak hereafter; but the flowers and ſeed-veſſel refer it properly to the preſent claſs.

1. Ivy-leaved Sowbread.

Cyclamen foliis hederæ.

The root is a large, black, irregularly ſhaped lump, white within, and furniſhed with numerous fibres.

The leaves riſe in a conſiderable number, and ſtand on long, weak footſtalks.

They are of an angulated form, not unlike ſome leaves of ivy; for in thoſe there is great variety; they are heart-faſhioned at the baſe, pointed at the end, and notched irregularly at the ſides; and often are ſpotted.

The flower is large, and of a beautiful deep blue.

It ſtands on a tender, naked ſtalk, about four or five inches in height, and has a very ſingular aſpect from the points running upwards.

The ſeed-veſſel is large, and ſtands on a twiſted pedicle; the upper part of the ſtalk, when the flower is fallen, turning in the manner of a cork ſcrew.

It is a native of Germany and other parts of Europe, and grows in the damp parts of foreſts. It flowers in Auguſt.

C. Bauhine calls it *Cyclamen hederæfolio.* Linnæus, *Cyclamen corolla retroflexa.*

This author allows only this ſingle ſpecies of the plant: but there are two others; the round-leaved and the narrow flowered being abſolutely different. Culture makes innumerable varieties from theſe three ſpecies, and the various kinds all riſe from one or other of them; but not all from this one, as that author imagines.

2. Round-leaved Sow-bread.

Cyclamen rotundifolium.

The root is tuberous, large, and roundiſh; black on the outſide, white within, and furniſhed with ſome long fibres.

The leaves riſe in little cluſters from different parts of it, and are ſupported by ſlender and weak footſtalks: they are of a roundiſh, or rather oval figure; broad at the baſe, where they are a little heart faſhioned, and narrower to the point: of a deep green, ſpotted uſually with white, and purple underneath; and not at all notched at the edges.

The ſtalks are numerous, weak, naked, rediſh, and four inches high.

The flowers ſtand ſingly, one on each foot ſtalk, and they are large, and of a beautiful red: they have a pleaſant ſmell.

The ſegments of this flower are broader and ſhorter than in the other ſpecies, and ſhew it to be eſſentially different.

The ſeed-veſſel is large and roundiſh.

It is frequent in the damp foreſts of Switzerland, and flowers in September.

C. Bauhine calls it *Cyclamen orbiculato folio inferne purpuraſcente.* Others, *Cyclamen rotundifolium autumnale.*

3. Slender-flowered Sowbread.

Cyclamen floribus anguſtis.

The root is large and tuberous, black on the ſurface, white within, and hung with many fibres.

The leaves ſtand on long, ſlender footſtalks, and they are large and angulated: they are of a deep green on the upper ſide, but frequently diſtinguiſhed by white ſpots and white edges, and red underneath.

The ſtalks which ſupport the flowers are long, weak, and rediſh: they are naked, and only one flower ſtands on each.

This is large, and of a beautiful pale red: the ſegments turn up as in the other kinds; but they are much narrower; and the flower, though equal in length, is vaſtly ſlenderer than in either of them.

The ſeed-veſſel is ſmaller than in the others, and round.

It is a native of Italy, and flowers in ſpring.

C. Bauhine calls it *Cyclamen folio anguloſo.* J. Bauhine, *Cyclamen flore rubro graciliore vernum.*

The two other ſpecies are properly autumnal: they flower toward the end of ſummer, at which time there are no leaves on the plant. When the flowers are faded the leaves appear, and remain green all winter: they die off in May, and nothing is then ſeen till autumn.

They all agree in virtues, being gently purgative.

The root, dryed and powdered, is beſt for this purpoſe; and the doſe is five and twenty grains. It is good in the jaundice and all obſtructions of the viſcera.

The freſh juice of the leaves is excellent againſt inflammations of the eyes. It is alſo good in the piles.

GENUS VIII.

AZALEA.

AZALEA.

THE flower consists of a single petal, which is long, tubular, and divided into five segments at the edge: the fruit is a single capsule, of a round figure, containing five cells; and the cup is small, coloured, formed of one piece, and divided into five segments.

Linnæus places this among the *pentandria monogynia*; each flower having five threads, and the style from the rudiment of the fruit being single.

Authors have been perplexed where to put the several plants belonging to this genus: some have called them *cistus's*; but the difference is very obvious, as will be seen when we treat of *cistus*, that genus being of another class.

1. Procumbent Azalea.

Azalea procumbens.

The root is long and spreading, divided into many parts, and furnished with numerous fibres.

The shoots are numerous, and spread every way upon the ground into a very large and thick tuft.

The stalks are woody, and covered with a dark coloured rind, tough, thin, and four or five inches long, sometimes much more.

The leaves are very numerous and very small: they are of a dark green, and they stand in pairs: they are oblong, slender, and sharp-pointed.

The flowers grow at the tops of the branches, two, three, or more together: they are large, and of a beautiful red.

The seed-vessel is large, and contains many seeds.

It is a native of the mountains of Germany, and flowers in July.

C. Bauhine calls it *Chamæcistus serpyllifolia floribus coccineis.* Others, *Cystus serpyllifolia:* but the leaves are narrower than to be properly expressed by that name.

2. Clammy Azalea.

Azalea viscosa.

The root is woody and spreading.

The shoots are numerous and tough, woody, and covered with a grey rind.

The leaves are frequent, of a pale green, and pinnated: each consists of three or more pairs of large, oval pinnæ, with an odd leaf much larger than either at the end: they are hairy and not serrated.

The flowers stand in little clusters at the tops of the branches, eight or ten together: they are long, slender, and very beautiful, and have a fragrant smell: they are hairy on the outside, and clammy to the touch.

The seed-vessel is small, but contains numerous seeds.

It is a native of Virginia, where it is common in the woods.

Plukenet calls it *Cistus Virginiana flore et odore periclymeni.*

These plants have no known virtues.

GENUS IX.

LEADWORT.

PLUMBAGO.

THE flower consists of a single petal, which is tubular in the lower part, narrower toward the neck than near the bottom, and divided into five segments at the edge.

The fruit is a single capsule, of a rude and imperfect form, containing only one seed: the cup is formed of one piece, and is pentangular, rough on the surface, and divided into five segments at the rim.

Linnæus places this among the *pentandria monogynia*; the flower having five threads, and the style from the rudiment of the capsule being single.

1. Common Leadwort.

Plumbago vulgaris.

The root is long, large, and furnished with many fibres.

The first leaves rise in a thick, small tuft, and are of a deep green, broad, somewhat oval in shape, and without footstalks.

The stalks rise in the centre of the tuft, and are round, firm, upright, very much branched, and two feet high: they are usually of a deep purplish colour, often blackish.

The leaves stand irregularly on them, and resemble those at the root: they are oblong, broad, and oval toward the end, but with a narrow and long base: they have no footstalks, but enclose the main stalk at the bottom.

From the bosom of every leaf rises a branch, and on the tops of these stand the flowers: they are numerous, moderately large, and purple: they are paler at first, and grow of a deeper colour as they open, and decline into a red as they fade.

The seed-vessel is a thin skin, or little more, enclosing

encloſing a ſingle ſeed of the bigneſs of a corn of wheat.

It is a native of Italy, and flowers in July.

C. Bauhine calls it *Lepidium dentillaria dictum*: Others, *Plumbago Plinii.*

2. Heart-leaved Leadwort.

Plumbago foliis cordatis.

The root conſiſts of a number of thick fibres, brown, tough, and hot to the taſte; filling the mouth with water when chewed, in the manner of pyrethrum.

The firſt leaves are large, and of a deep green, they riſe eight or ten together: they have long footſtalks, and are oblong and broad, not dentated at the edge, heart-faſhioned at the baſe, and pointed.

The ſtalk is round, firm, upright, and two foot high.

The leaves ſtand irregularly on it, and reſemble thoſe from the root: the lower ones have conſiderable footſtalks; thoſe on the upper part of the ſtalk and branches have none.

The flowers are very beautiful, large, and ſnow white.

Their cup is hairy: the fruit is long and rough.

It is a native of Ceylon, but grows freely in our gardens.

Commelin calls it *Lychnis Indica ſpicata ocymaſtri folio, fructibus oblongis lappaceis, radice urente.*

GENUS X.

LYCHNIDEA.

LYCHNIDEA.

THE flower conſiſts of a ſingle petal; the lower part is tubular, long, and bent; and the rim is divided into five broad ſegments: the fruit is a ſingle capſule, of an oval figure, but with three ridges, and contains three cells: the cup is formed of a ſingle piece, marked with ten ridges, and divided into five ſegments.

We have yet no Engliſh name for this genus.

Linnæus places it among the *pentandria monogynia*; the threads in each flower being five, and the ſtyle from the rudiment of the capſule ſingle.

This author takes away the received name of the genus, and calls it *phlox*: we preſerve that by which it is beſt known.

1. Narrow-leaved hairy Lychnidea.

Lychnidea anguſtifolia villoſa.

The root is long, ſlender, and creeping.

The firſt leaves riſe in a very thick tuft: they are long, narrow, and of a duſky green: they have no footſtalks, and are a little hairy.

The ſtalks riſe in the centre, and they are round, firm, numerous, and a foot high: they are very little branched, and are of a brown colour, and a little hairy.

The leaves ſtand in pairs, and have no footſtalks: they are long, narrow, and ſharp-pointed, hairy, not at all divided at the edges, and of a beautiful green.

The flowers ſtand in a tuft at the top of the ſtalks, and are large, and of a pale red, ſometimes of a deeper, and ſometimes white: the cups are woolly.

The ſeed veſſel is large, and the ſeeds are numerous.

It is frequent in Virginia, and flowers in July.

Ray calls it *Lychnoides marilandica calyculis lanuginoſis foliis anguſtis acutis*. Plukenet, *Lychnidea umbellifera blattariæ accedens Virginiana major repens pſeudomelanthii foliis piloſis flore pentapetaloide fiſtuloſo.*

2. Small-leaved Lychnidea.

Lychnidea foliis parvis.

The root is long, ſlender, and full of fibres.

The ſhoots that firſt ſprout from it lie upon the ground, and take root in numerous places.

The ſtalk is upright, round, firm, of a pale green, a little hairy, and about ſix inches high.

The leaves ſtand in pairs upon it: they are very ſmall, and not numerous: they are of a duſky green, and hairy, and generally droop; they are narrow, oblong, and have no footſtalks. From the boſoms of theſe riſe young ſhoots, which have the ſame kind of leaves on them, but in a greater number; as have alſo thoſe which firſt come up, and which trail on the ground.

The flowers are large and very beautiful: they have each its ſeparate hairy footſtalk; and they generally riſe oppoſite to one another.

The ſeed veſſel is large, and the ſeeds are numerous.

It is a native of Virginia.

Pluknet calls it *Lychnideæ blattariæ accedens Virginiana minor repens, hirſutis camphoratæ foliis.* Linnæus, *Phlox foliis ſubulatis hirſutis, floribus oppoſitis.*

3. Narrow-leaved ſmooth Lychnidea.

Lychnidea anguſtifolia glabra.

The root is long, ſlender, creeping, and full of fibres.

The ſtalk is round, tender, of a pale green, branched, not at all hairy, and five inches high.

The leaves are very numerous, and of a pale green: they ſtand in pairs, and are extremely narrow; but they are broadeſt at the baſe where they adhere to the ſtalk, and ſmaller all the way to the point.

The flowers are large, and ſtand ſingly at the

tops of the branches: they are of a beautiful flesh colour; sometimes deeper, and sometimes white.

The seed-vessel is small, and the seed minute.

It is a native of Virginia, and flowers in June.

Plukenet calls it *Lychnidea blattariæ accedens Virginiana camphorata glabris foliis.*

GENUS XI.

GUINEA PEPPER.

CAPSICUM.

THE flower consists of a single petal, which is tubular at the bottom, divided into five pointed segments, and folded.

The fruit is a large capsule, formed of a thick, coloured, rind; and contains numerous seeds in two cells.

The cup is formed of a single piece, divided into five segments, and remains with the fruit.

Linnæus places this among the *pentandria monogynia*; the threads being five in every flower, and the style from the rudiment of the fruit single.

He calls this fruit a berry without any pulp. Its shape and texture shew the contrary.

1. Common Guinea Pepper.

Capsicum vulgare.

The root is composed of a great many thick and spreading fibres.

The stalk is round, thick, striated, very much branched, and a foot and half high.

The leaves are numerous, and of a very beautiful green: they stand irregularly, and have long footstalks. They are large: broadest at the base, smaller to the point, and not at all serrated at the edges.

The flowers are large and white: they stand in the divisions of the branches.

The fruit is large, long, and green at first, but when ripe, of a beautiful red. Its high colour and smooth surface give it the appearance of polished coral.

It is a native of Africa and of South America; and flowers in July.

C. Bauhine calls it *Piper indicum vulgatissimum.* Others, *Capsicum vulgare.*

2. Small-fruited Guinea Pepper.

Capsicum fructu parvo.

The root is composed of a great number of long and thick fibres.

The stalk is round, firm, upright, and a foot high, and is not much branched.

The leaves are numerous, and stand irregularly: they are large, and of a deep green: they stand on long footstalks, and are broadest toward the middle, and terminate in a sharp point.

The flowers are small, and of a greenish white: they do not rise singly from the divisions of the branches, but in clusters, three or four together, from the sides of the mainstalk, supported by a general pedicle, and each flower also by its own.

The fruit is roundish: it is not bigger than a cherry; and, when ripe, it is of the same fine red colour and glossy surface with the common kind.

It is a native of Africa, and flowers in June. The fruit is hot to the taste, but not so violently as that of the other.

The fruit of the common kind is used in sauces: when dryed and powdered, it makes what we call Cayan pepper. That of the last described species is more esteemed in Africa than the other; having less acrimony and a better flavour.

GENUS XII.

ROELLA.

ROELLA.

THE flower consists of a single petal, which is formed into a short tube at the bottom, and divided into five broad segments at the rim: the fruit is a short capsule, containing two cells, and crowned with the cup; which is of a single piece, divided into five pointed and dentated segments.

Linnæus places this among the *pentandria monogynia*; the threads in each flower being five, and the rudiment of the fruit single.

Others have called these plants species of campanula, but wrongly.

Prickly Roella.

Roella spinosa.

The root is long, fibrous, and of a brown colour.

The stalks are woody, numerous, slender, firm, tolerably erect, and eight or ten inches high; sometimes they will grow considerably larger.

The leaves stand irregularly, and are small, slender,

Round leavd Sowbread

Slender flowerd Sowbread

Mountain Bindweed

Ivy leavd Sowbread

Procumbent Azalea

Clammy Azalea

Common Laudnort

Heart leavd Laudnort

Small leavd Sysimbrium

Narrow leavd Small Sysimbrium

Narrow leavd Sysimbrium

Prickly Roella

Red Guinea Pepper

Flowering Reed

Common Capsicum

ſlender, and hairy: the whole aſpect of them, at a diſtance, is not unlike that of ſome of the kinds of heath in their young ſhoots; but, when handled, they are prickly.

The flowers are large and very beautiful: they ſtand ſingly on the tops of the branches, and are of a pale purple, ſometimes of a deep violet colour, and ſometimes almoſt white.

The ſeed-veſſel is very ſhort, and the cup continues on it enlarged.

It is a native of Africa, and principally about the ſea coaſt.

Commelin calls it *Campanula Africana ſpinoſa flore violaceo.*

It virtues are not known.

GENUS XIII.

FLOWERING REED.

CANNACORUS.

THE flower conſiſts of a ſingle petal, and is divided into ſix parts irregularly diſpoſed: the fruit is a ſingle capſule, which is large, rough, and contains three cells: the cup is compoſed of three leaves, which are ſmall, coloured, and permanent.

Linnæus places this genus among his *monandria monogynia*; there being only a ſingle filament or thread in each flower, and the rudiment of the capſule being alſo ſingle.

He reduces the old name *cannacorus* to a ſhorter, calling it *canna*.

Broad-leaved Flowering Reed.

Cannacorus latifolius.

The root is tuberous, and of an irregular figure, full of thick parts, and of long and large fibres.

The firſt leaves are very large, long, and broad; of a freſh and beautiful green, and placed on hollow footſtalks: they are pointed at the end, and waved at the edges.

The ſtalk is round, firm, upright, and three or four feet high, and is covered the greateſt part of the way up, by the ſcabbards of the leaves.

The leaves ſtand irregularly on it, and are, like thoſe from the root, broad, large, of a freſh green, and ſharp-pointed.

The flowers are large, and of a beautiful red; long, and very ſingular in their ſtructure: they are divided to the baſe, the ſegments adhering to one another only there; and theſe are irregular in form, as well as diſpoſition: three of them ſtand outward, and are erect and ſhorter; the other three ſtand inward, and are longer; and of theſe, two are erect and one is reflex.

The ſeed-veſſel is large, and very rough on the ſurface; and the ſeeds are large and few.

It is a native of Aſia and Africa, and of the warmer parts of America; and flowers in June.

C. Bauhine calls it *Arundo indica latifolia*. Others, *Cannacorus*, and *Canna*.

Its virtues are not known with certainty.

IT may appear, to thoſe who are unacquainted with the practice of phyſick, that the virtues attributed to plants in this work are too few; and the detail too ſhort on that head.

To obviate this objection, it will be proper once to obſerve, that the error of moſt books written on this ſubject is aſcribing too much to moſt plants. Whoever ſhall turn over the writings of Gerard and Parkinſon, in this view, will ſee that almoſt every herb is ſaid to be a cure for almoſt every diſeaſe; and the ſame fault runs through moſt others, in a greater or leſſer degree.

Hence, the young phyſician, unable to judge what he is to regard, and what neglect, has in a manner rejected all: becauſe too much has been written of the virtues of plants, too little is believed. From this, chemical medicines, made principally from minerals, have come ſo generally into uſe, and the galenical, obtained moſtly from plants, have been and are ſo much neglected.

To remedy this evil, the utmoſt care has been taken, throughout the courſe of the preſent work, to diſtinguiſh the real from the imaginary virtues of plants: the former have been carefully preſerved; and the latter rejected.

For this reaſon the catalogues of virtues will appear ſhorter in this than in other books of a like kind; but, it is apprehended, it will therefore be more uſeful.

This is a point that has demanded the author's principal attention; and deſerves that of every writer more than any other part in a work on this ſubject: the reſt is amuſement, but in this the healths and lives of mankind are concerned.

The END of the FOURTH CLASS.

THE BRITISH HERBAL.

CLASS V.

Plants whoſe flower conſiſts of a SINGLE PETAL *of an irregular form, and whoſe ſeeds are contained in a* SINGLE CAPSULE.

THIS, like the preceding, is a claſs perfectly and obviouſly diſtinguiſhed by nature from all others: yet, Linnæus, who has for ſome years led the botanical ſtudents according to his fancy, has diſpoſed the plants of which it conſiſts in various and very diſtant parts of his works: ſome of them are ſeparated from others by eleven intermediate claſſes, and by almoſt ſix hundred genera.

They all perfectly agree in thoſe two eſſential and obvious characters, that the flower conſiſts of a ſingle petal, and the ſeeds are encloſed in a ſingle capſule.

They differ from thoſe of the laſt claſs in that the flower is of an irregular form. As in thoſe it is plain and regular: in theſe it is, for the moſt part, of the labiated kind, or of a form nearly approaching to that ſtructure.

Mr. Ray ſaw this diſtinction between the plants of the preſent, and thoſe of the preceding claſs, but he has arranged them only under two diviſions of the ſame claſs, making them eſſentially agree: this is a practice not liable to the cenſure of error; though the keeping them diſtinct is much more uſeful.

Though the flowers in the plants of this claſs agree, in a great meaſure, with thoſe of the labiated kind, yet the diſtinction is very great in the diſpoſition of the ſeeds: theſe in the labiated plants, properly ſo called, ſtand naked in the cup of the flower; and in thoſe of this genus they have a regular capſule.

This is a ſufficient diſtinction in nature; yet, Linnæus, who does not regard either the ſhape of the flower or condition of the ſeeds as a claſſical character, but builds that diviſion upon the number and diſpoſition of the filaments or threads in the flower, places the greater part of theſe plants in the ſame claſs with the labiated kind; as the *linaria*, *pedicularis*, and the reſt; and makes their having a capſule for the ſeeds only a ſubordinate diſtinction, as Mr. Ray does the peculiar ſhape of the flower: others of them, as the *pinguicula* and *lentibularia*, he places among his *diandria*; and the *gladiolus lacuſtris*, ſeparately from all the reſt, among his *ſyngeneſia monogamia*.

I ſave the ſtudent the labour of turning to different parts of a work to ſeek for plants of the ſame kind; and ſhall keep them together in his memory, by placing them together in the plates.

The intent of this work is to render the ſtudy of plants familiar. As none will be ſuppoſed to underſtand the ſcience, while the preſent faſhion laſts, who is not able to converſe upon it in the language of Linnæus, I ſhall occaſionally explain his terms: and as none has perplexed the ſtudy ſo much by a new method as this author, I ſhall teach the reader at once to underſtand it, and neglect it.

SERIES

SERIES I.

NATIVES of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this country.

GENUS I.

BUTTERWORT.

PINGUICULA.

THE flower conſiſts of a ſingle petal, formed into two lips and a long ſpur: the upper lip is divided into four ſegments, the lower into two, and the ſpur runs out behind: the cup reſembles the diviſions of the flower, and remains with the ſeed-veſſel: this is a ſingle capſule, of an oval form, but compreſſed at the top.

Linnæus places this among the *dyandria monogynia*; the threads in the flower being two, and the rudiment of the ſeed-veſſel and its filament or ſtyle ſingle.

From this number of the threads he places *pinguicula* in the ſame genus with the *jaſmine*, *olive*, and *lilac*, ſeparating it from the *pedicularis*, becauſe that has four, two longer and two ſhorter; which, with the others, he therefore joins to other unlike plants.

DIVISION I. BRITISH SPECIES.

1. Common Butterwort.

Pinguicula vulgaris.

The root conſiſts of numerous thick fibres, riſing from a longiſh head, and ſpreading irregularly under the ſurface.

The leaves are numerous, and riſe in a thick cluſter.

They have no footſtalks: they are broadeſt at the bottom, undivided at the edge, and ſharp at the point: their colour is a pale yellowiſh green, and they are of a fleſhy ſubſtance.

The ſtalks riſe in the centre, four or five together.

They are ſlender, naked, and undivided: each ſupports a ſingle flower.

This is large, and very beautiful: it reſembles, in ſome degree, a violet: its colour is a pale purple, pale red, or white; for there are all theſe variations frequent, and it has a long ſpur.

The ſeed-veſſel is large, oval, compreſſed at the end, and without any diviſion within. The ſeeds are numerous and very ſmall.

It is frequent in the north of England upon boggy ground, and flowers in June.

C. Bauhine calls it *Sanicula montana flore calcari donato.* Others, *Pinguicula vulgaris.*

2. Leſſer Butterwort.

Pinguicula minor.

The root is compoſed of a great cluſter of fibres, which have no other head than the baſe of the leaves: they are very ſlender, black, long, and run perpendicularly.

The leaves are numerous, oblong, and lie ſpread upon the ground.

They are narrow toward the baſe, broadeſt near the middle, and ſmall again at the point: their colour is a pale green, and they have red veins: they are thin, and, as it were, naked.

The ſtalks are ſlender, about three inches high, and quite ſingle or undivided.

One flower ſtands on the top of each, and this is ſmall, and of a pale red, or white: the ſpur in this is thicker and ſhorter than in the common kind.

The ſeed-veſſel is ſmall, and the ſeeds are very minute, and of a duſky colour.

It is frequent in Cornwal and our other weſtern counties on bogs; elſewhere it is rare.

It flowers in May.

Merret calls it *Pinguicula minima flore albo*; that is, butterwort with a white flower; but the more uſual colour is red. Ray calls it *Pinguicula flore minore carneo.*

The *common butterwort* has conſiderable virtues both inwardly and outwardly; but they are not much known out of the places where it grows, becauſe it can neither be well kept in our gardens nor brought freſh to our markets.

The whole plant, bruiſed with white wine, and the juice, expreſſed, and taken thick as it comes from ſqueezing, is a rough but uſeful medicine in dropſies.

A ſyrup made of the juice has the ſame virtue, but in a milder degree. It is a good purge, and operates alſo by urine.

The people of Yorkſhire make an ointment of the leaves and hogs-lard, with which they dreſs chaps and injuries in their cows udders: this has led them to uſe it for hurts and ſores upon themſelves; and it ſtands, upon experienced report, as an excellent vulnerary.

Thoſe to whom we owe the knowledge of it thence called the plant *Yorkſhire ſanicle.*

DIVISION II. FOREIGN SPECIES.

Butterwort with a ſhort ſpur.

Pinguicula calcari breviſſimo.

The root conſiſts of numerous fibres, riſing from a ſmall head: they are rediſh, thick, and irregular, and ſpread under the ſurface.

The leaves riſe in a thick cluſter, ten or twelve together.

They are long, and have no footſtalks: they are broadeſt near the baſe, narrower at the point, and of a pale green colour and fleſhy ſubſtance.

The ſtalks are ſlender, naked, and three inches high.

The flowers ſtand ſingly, one on each, and they are ſmall and white, and have a very ſhort ſpur.

The ſeed veſſel is oval and large.

It is frequent on the mountains in Germany, and flowers in June.

Ray calls it *Pinguicula flore albo minore calcari breviſſimo.*

GENUS II.

TOADFLAX.

LINARIA.

THE flower conſiſts of a ſingle petal, and has a labiated aſpect: it is formed into an oblong tube, with a ſpur and a pair of lips, the ſpace ſhut between them. The upper lip is divided into two parts, and turned back at the ſides: the lower lip is divided into three parts, and is obtuſe; and the piece which ſhuts up the ſpace between the lips, and may be called the palate, is convex: this riſes from the lower lip. The cup is formed of a ſingle leaf divided into five ſegments, and remains when the flower is fallen. The ſeed-veſſel is roundiſh, plain, and, when ripe, divided in a regular manner.

Linnæus places this among his *didynamia angioſpermia*; ſeparating it eleven claſſes from the *pinguicula*, to which it is ſo evidently allied.

That plant, becauſe there are only two threads in each flower, he places among the *diandria*. This has its rank with the *didynamia*; becauſe it has in each flower four threads, two of which are longer, and two ſhorter: it comes under the diſtinction of *anigioſpermia*, becauſe its ſeeds are contained in a capſule; thoſe of the other diviſion of that claſs ſtanding naked in the cup.

Linnæus does not allow *linaria* to conſtitute a diſtinct genus in this claſs; but, taking away the antient and received name, he makes it a ſpecies of *antirrhinum*, calling all the kinds of *toadflax* ſpecies of *ſnapdragon*.

Antirrhinum and *linaria* agree, indeed, as plants of the ſame claſs; each having a flower conſiſting of a ſingle petal; each a capſule for the ſeeds, and each, to follow this moſt ingenious author's more minute reſearches, four threads; two longer, and two ſhorter.

This brings them all into the ſame claſs; but there is diſtinction enough between them to keep them in ſeparate genera; and this is the more needful to be obſerved, becauſe the ſpecies of each are numerous, and the joining them all under one generical name would create difficulty, if it did not introduce confuſion.

The difference between *toadflax* and *ſnapdragon* is this: the flower of *toadflax* has a long and ſharp ſpur, and the capſule of the ſeeds is plain, regular in ſhape, and divides regularly when ripe; on the contrary, the flower of *ſnapdragon* has no ſpur, and the capſule is irregularly and ſingularly conſtructed at the bottom, and opens unequally.

This is a very ſufficient diſtinction of the genera: Linnæus knew this, for he has mentioned it; and if he had not, there would be no doubt of his having obſerved it; becauſe no author has examined the ſtructure of flowers ſo accurately, or underſtood their ſeveral parts ſo well. His faults are not thoſe of omiſſion: his misfortune, and that of the world, has been that, having formed a ſyſtem, which did him credit by its novelty, he would not depart from it in favour of even his own obſervations.

This author has not only thus joined the *linaria* and *antirrhinum* in one genus, but he comprehends under the ſame character and name alſo, the *cymbalaria* and *elatine*; plants which we ſhall ſhew in the ſucceeding genera to be ſufficiently diſtinct, and well entitled to their ſeparate names.

DIVISION I. BRITISH SPECIES.

1. Common Toadflax.

Linaria vulgaris.

The root is long, ſlender, whitiſh, hard, and furniſhed with a few fibres.

The firſt leaves are ſmall, ſlender, pointed, and of a yellowiſh green: the ſtalk ſoon grows up amongſt theſe, and they immediately fade.

The ſtalk is round, firm, upright, and two foot high.

It

It is of a pale bluiſh green, ſometimes ſimple, and frequently divided into ſeveral branches.

The leaves are numerous, and ſtand irregularly: they are long, narrow, undivided at the edges, and without footſtalks.

Their colour is a pale bluiſh green.

The flowers are large, numerous, and beautiful: they ſtand in a kind of ſpikes at the tops of the ſtalks, and are in general of a very pale and very beautiful yellow, with a deeper, or orange yellow in ſome parts.

The ſeed-veſſel is large and round: the ſeeds are ſmall and brown.

It is common on dry banks, and flowers in June.

C. Bauhine calls it *Linaria vulgaris lutea flore majore*. Others, *Linaria vulgaris*.

Our common people, from the mixture of a very pale and deep yellow, call it *Butter and eggs*.

2. Blue, ſweet Toadflax.

Linaria cærulea odorata.

The root is long, ſlender, hard, whitiſh, and furniſhed with many fibres.

The ſtalks are numerous, and a foot and half high: they are round, ſlender, upright, and rarely divided into branches.

The leaves are very numerous, and they ſtand thick and cloſe upon the ſtalk: they are of a pale green, very narrow, and have no footſtalks.

The flowers ſtand at the tops of the ſtalks, and are of a beautiful pale blue, and ſtriated.

The ſeed-veſſels are large and rounded.

It is found in Cornwal and Devonſhire; and flowers in July.

C. Bauhine calls it *Linaria capillaceo folio erecta, flore odoro.* J. Bauhine, *Linaria odorata mons peſſulana.*

3. Short-leaved Toadflax.

Linaria foliis brevibus.

The root is long, ſlender, woody, and divided, and is hung with a few fibres.

The firſt leaves riſe in a ſmall tuft, and are oblong, ſomewhat broad, and of a pale green: they have no footſtalks, and when the ſtalk riſes they quickly fade away.

The ſtalk is round, upright, a foot and half high, ſeldom branched, though uſually there riſe a few ſhoots from the boſoms of the leaves near the top.

The leaves are numerous, and of the ſhape of thoſe of the *common toadflax*, but ſhorter: they have no footſtalks: their colour is a pale green: they are undivided at the edges, ſharp-pointed, and of a fleſhy ſubſtance.

The flowers ſtand in a kind of ſpikes at the top of the ſtalks and branches, and they are of a beautiful pale blue.

The ſeed-veſſels are large, and the ſeeds are ſmall and brown.

It is found in Surry and ſome of the adjacent counties, in cornfields, and barren paſtures, and on walls: it flowers in July.

Robinus calls it *Linaria oſyris flore cinericeo*; but the flower is properly of a pale blue, not aſh-coloured.

4. Small, red Toadflax.

Linaria parva rubeſcens.

The root is ſmall, woody, divided, and ſpreading.

The ſtalks are numerous, weak, round, upright, and very much branched: they are eight inches high, and of a pale green.

The leaves are numerous, and ſtand irregularly: they are narrow, long, and of a duſky green.

The flowers ſtand at the tops of the ſtalks, and ſeparately on other parts of the plant, riſing from the boſoms of the leaves: they are ſmall, and of a pale red.

The ſeed-veſſel is round, and the ſeeds are ſmall.

It is common in our cornfields, and flowers in June.

Ray calls it *Linaria antirrhinum dicta*; diſtinguiſhing it from the *antirrhinums*, with which others had joined it, from the ſhape and ſtructure of the flower and ſeed-veſſel. C. Bauhine calls it *Antirrhinum arvenſe minus.* Others, *Antirrhinum arvenſe minimum*: this is the more improper, as we have wild alſo in our cornfields a ſpecies of ſnapdragon, properly ſo called.

The *common toadflax* is a plant poſſeſſed of virtues too much neglected. It has its uſes both inwardly and outwardly, and in both kinds very worthy of notice.

The whole freſh herb boiled in ale is a country purge; it operates briſkly, and alſo promotes urine.

The freſh herb bruiſed, with ſome white wine, is a ſtronger purge, and ſometimes works alſo by vomit.

An infuſion of the whole herb, root and all, juſt before it gets into flower, works very powerfully by urine.

In either of theſe forms it is excellent againſt dropſies: in the beginning of that diſeaſe the infuſion is the beſt method of giving it; when it is more advanced the country decoction in ale is proper; and when the diſeaſe is violent, and the conſtitution can bear it, the expreſſed juice, in the manner we have named, with white wine, is beſt of all.

The juice of the leaves is excellent againſt inflammations of the eyes. We owe this to Tragus, who reports it as confirmed from his own long experience; and trials ſince made ſhew it was true.

The juice is alſo excellent for cleanſing old ulcers.

A decoction, or ſtrong infuſion of the tops, taken morning and evening, cures the jaundice.

An ointment or pultice, made with the leaves of common *toadflax*, is excellent in the piles.

The ſeveral other ſpecies of *toadflax*, Engliſh and foreign, poſſeſs the ſame virtues, though moſt of them in a leſſer degree. The *antirrhina* of ſome ſpecies have very different qualities, a ſufficient reaſon why they ſhould be kept as nature has diſpoſed them, diſtinct, and under ſeparate names.

DIVISION II. FOREIGN SPECIES.

1. Yellow, trifoliate Toadflax.

Linaria trifoliata flava.

The root is long, ſlender, whitiſh, and furniſhed with numerous fibres.

The ſtalks are ſlender, upright, numerous, and a foot and half high: they are of a pale yellowiſh green, and uſually run up ſingle, without any diviſions into branches.

The leaves are numerous, broad, ſhort, of a duſky green, and they have no footſtalks.

They grow irregularly, but moſt frequently three from one place: from this it obtained the name of *trifoliate toadflax*; but tho' moſt of the leaves grow in this manner: there are frequently ſome that ſtand in pairs, and commonly a good number that grow ſingly toward the top of the ſtalk.

The flowers are large and beautiful: they are of a mixt yellow, and have long, ſharp ſpurs.

The ſeed veſſel is round, and the ſeed is blackiſh.

It is a native of Spain, and flowers in July.

C. Bauhine calls it *Linaria triphyllos minor lutea*. Others, from Cluſius, *Linaria valentina*.

2. Four-leaved Toadflax.

Linaria quadrifolia.

The root is ſmall, long, whitiſh, and divided: it has many fibres, and partly by them, partly by its own diviſions, ſpreads a great way under the ſurface.

The ſtalks are numerous, ſlender, weak, and a foot long.

They lie in part upon the ground, and in part raiſe themſelves, but feebly and in an irregular manner.

The leaves are numerous, and placed with great regularity: four riſe from the ſame ſpot all the way up the ſtalk, and theſe ſeveral fours are kept at pretty large diſtances.

The leaves are ſeparately longiſh, narrow, undivided at the edges, ſharp at the points, without footſtalks, and of a pale green.

The flowers are large and of a pale yellow, and they ſtand in cluſters at the tops of the ſtalks.

The ſeed-veſſel is large and rounded; and the ſeeds are ſmall and black.

It is a native of Spain, Italy, and Germany, and ſpreads at random over a great deal of their dry, barren grounds. It flowers in June.

C. Bauhine calls it *Linaria quadrifolia lutea*. Columna, *Linaria tetraphylla lutea minor*. We, *Four leaved toadflax*.

3. Low, purple Toadflax.

Linaria purpurea procumbens.

The root is compoſed of a multitude of thick, irregular, white, and woody fibres: they riſe from a ſmall head, and ſpread themſelves far under the ſurface.

The ſtalks are very numerous, twenty or more ſpring from the ſame head of the root: they are round, ſlender, weak, and of a pale colour: they lie ſpread upon the ground about a third part of their length, and riſe irregularly up the reſt.

The leaves are very ſmall, and very numerous: they ſtand thick, and perfectly irregularly upon the ſtalks, and are of a bluiſh green: they have no footſtalks, and they are undivided at the edges, narrow, and pointed at the ends.

The flowers ſtand in long and thick ſpikes at the tops of the ſtalks and branches, and are of a deep purple: they are ſmall, but very pretty; ſometimes they are paler and redder, ſometimes perfectly blue; but their moſt conſtant and natural colour is purple.

The ſeed-veſſels are ſmall, and the ſeeds are very ſmall and black.

It is a native of Spain and of ſome parts of Germany; and flowers in Auguſt. It is moſtly found on hills near ſprings.

C. Bauhine calls it *Linaria cærulea repens*. Others, *Linaria purpurea*, and *Oſyris purpuro cærulea repens*.

4. Stellated Toadflax.

Stellatis foliis ſtellatis.

The root is very ſlender, divided, and furniſhed with ſmall fibres.

The ſtalks are ſlender, weak, and of a pale green, ſometimes rediſh: they ſtand but weakly upright, and ſeldom are ſtrait; and there generally lie ſeveral others about the root, which ſpread on the ground, and are fuller of leaves, though they bear no flowers.

The leaves are longiſh, narrow, undivided at the edges, pointed at the ends, and of a pale aſh coloured green: they grow round the ſtalks, in the manner of thoſe of the ſtellate plants, like the rowels of a ſpur, or the rays of a ſtar, as they are commonly repreſented.

There are uſually five principal leaves at a joint, and often ſome ſmall ones from their boſoms.

Toward the tops of the principal ſtalks which bear the flowers they grow with leſs regularity, often ſingly, and ſometimes they are in this part irregularly divided.

The flowers ſtand at the tops of the ſtalks in long, thick ſpikes: they are yellow, and like thoſe of the *common toadflax*, only ſmaller.

The ſeed-veſſel is large and round, the ſeeds are ſmall and brown.

It is a native of Sicily, and flowers in July.

Boccone calls it *Linaria ſicula multicaulis mollugiuis folio*. Others, *Linaria ſolus quinis*, or *Toadflax with leaves five at a joint*.

5. Purple mouthed Toadflax.

Linaria flore abeſcente ritu purpureo.

The root is long, ſlender, white, hard, and hung with numerous fibres.

The ſtalks are round, thick, firm, upright, but little branched, and two feet high.

The leaves are numerous, and ſtand irregularly on the ſtalk: they are long and narrow, reſembling that

that of the *common toadflax*, but ſharper at the point, and longer in proportion to their breadth: their colour is a freſh green, and they have no footſtalks.

The flowers ſtand in ſpikes at the tops of the ſtalks, and they are large and beautiful: they are whitiſh, except the opening, which is of a beautiful purple.

It is a native of Italy, and flowers in July.

C. Bauhine calls it *Linaria pallida ri&u purpureo.* Dillenius, and others, *Linaria flore albicante.*

6. Indented-leaved Toadflax.

Linaria foliis dentatis.

The root is long, and furniſhed with many fibres.

The firſt leaves are large; they riſe in a thick tuft, and they remain when the ſtalk is riſen, which is the caſe of few others of the *toadflax* kind.

They are long, broad, of a beautiful green, and have no footſtalks: they are narroweſt at the baſe, broadeſt toward the end, and indented at the edges.

The ſtalk riſes in the centre of theſe, and is round, firm, upright, and a foot and half high: it is of a pale green, and ſometimes branched.

The leaves ſtand irregularly on it, and are not ſo numerous as on moſt of the others: they are long and narrow, and they have no footſtalks: thoſe toward the bottom of the ſtalk are like the radical leaves, but narrower and more deeply dented; thoſe higher up are much deeper divided, and toward the top of the ſtalk they conſiſt only of two ſide-diviſions and a long point.

The flowers ſtand in ſlender ſpikes at the tops of the branches: they are ſmall, and of a deeper or paler blue, and often white.

The ſeed-veſſels are large and round.

It is a native of Italy, and flowers in June.

C. Bauhine calls it *Linaria bellidis folio.* Others, *Linaria odorata*, and *Oſyris odorata purpurea*, or *Linaria odorata purpurea.*

7. Little, blue Toadflax.

Linaria puſilla cærulea.

The root is ſmall and ſlender, and has but few fibres.

The firſt leaves are pinnated, ſmall, and beautiful: they are not very numerous: they ſtand on long footſtalks, and each conſiſts of about three pairs of pinnæ, which are ſmall, oval, and not at all indented.

The ſtalks are ſlender, erect, and ſix or eight inches high: they are not at all branched, and are of a pale yelloviſh green.

The leaves on them are few, and ſtand alternately: they are long, narrow, ſharp-pointed, not at all indented at the edges, and of a pale green: they have no footſtalks, and they grow more pointing upwards than thoſe of the generality of the other ſpecies.

The flowers ſtand in ſpikes at the tops of the ſtalks, and are large and blue.

The ſeed veſſel is ſmall and round; and the ſeeds are large and blackiſh.

It is a native of the ſouth of France, and flowers in May.

Lobel calls it *Linaria annua purpuro cærulea.* Others, *Linaria minor cærulea.*

8. Blue trifoliate Toadflax.

Linaria trifolia cærulea.

This is a very elegant little plant, and different from the larger trifoliate kind, not only in the colour of the flowers, but in the whole face and aſpect.

The root is long, ſlender, crooked, hard, and hung with a few fibres.

The ſtalks are numerous, weak, and about eight or ten inches high.

The leaves are broad and ſhort on the lower part of the ſtalk, and ſomewhat longer and narrower upwards: they ſtand by threes, and have no footſtalks: their colour is a pale green, and they are not at all indented at the edges.

The flowers ſtand in thick, ſhort ſpikes at the tops of the ſtalks, and are ſmall, and of a beautiful blue.

The ſeed-veſſels are large and roundiſh.

The ſeeds are ſmall and black.

It is a native of Italy, and flowers early in ſpring.

C. Bauhine calls it *Linaria tryphylla cærulea.* Columna, *Linaria cærulea apula.* We, *Blue trifoliate toadflax.*

GENUS III.

SNAPDRAGON.

ANTIRRHINUM.

THE flower conſiſts of a ſingle petal, and has the labiated ſhape: it is formed into a tube, two lips and a palate, and it has no ſpur. The upper lip is divided into two parts, and turned back at the edges: the lower lip is divided into three parts; and the palate is large, and ſhuts up the ſpace between the two lips. The cup is formed of a ſingle leaf, divided into five parts, and remains when the flower is fallen: the ſeed veſſel is a ſingle capſule, of an irregular form, reſembling in ſome degree the head of a calf, whence the plant has an Engliſh name, *calfs ſnout*; and it opens obliquely when the ſeeds are ripe.

Linnæus places this among his *didynamia angioſpermia*; there being two longer and two ſhorter threads in the flower; and the ſeeds being contained in a capſule.

He makes this and the *linaria* the ſame genus, as before obſerved; but the diſtinction, in the want of the ſpur of the flower, and the peculiar ſhape of the ſeed-veſſel, is evident.

It

DIVISION II. FOREIGN SPECIES.

1. Yellow, trifoliate Toadflax.

Linaria trifoliata flava.

The root is long, ſlender, whitiſh, and furniſhed with numerous fibres.

The ſtalks are ſlender, upright, numerous, and a foot and half high: they are of a pale yellowiſh green, and uſually run up ſingle, without any diviſions into branches.

The leaves are numerous, broad, ſhort, of a duſky green, and they have no footſtalks.

They grow irregularly, but moſt frequently three from one place: from this it obtained the name of *trifoliate toadflax*; but tho' moſt of the leaves grow in this manner: there are frequently ſome that ſtand in pairs, and commonly a good number that grow ſingly toward the top of the ſtalk.

The flowers are large and beautiful: they are of a mixt yellow, and have long, ſharp ſpurs.

The ſeed veſſel is round, and the ſeed is blackiſh.

It is a native of Spain, and flowers in July.

C. Bauhine calls it *Linaria triphyllos minor lutea*. Others, from Cluſius, *Linaria valentina*.

2. Four-leaved Toadflax.

Linaria quadrifolia.

The root is ſmall, long, whitiſh, and divided: it has many fibres, and partly by them, partly by its own diviſions, ſpreads a great way under the ſurface.

The ſtalks are numerous, ſlender, weak, and a foot long.

They lie in part upon the ground, and in part raiſe themſelves, but feebly and in an irregular manner.

The leaves are numerous, and placed with great regularity: four riſe from the ſame ſpot all the way up the ſtalk, and theſe ſeveral fours are kept at pretty large diſtances.

The leaves are ſeparately longiſh, narrow, undivided at the edges, ſharp at the points, without footſtalks, and of a pale green.

The flowers are large and of a pale yellow, and they ſtand in cluſters at the tops of the ſtalks.

The ſeed-veſſel is large and rounded; and the ſeeds are ſmall and black.

It is a native of Spain, Italy, and Germany, and ſpreads at random over a great deal of their dry, barren grounds. It flowers in June.

C. Bauhine calls it *Linaria quadrifolia lutea*. Columna, *Linaria tetraphylla lutea minor*. We, *Four-leaved toadflax*.

3. Low, purple Toadflax.

Linaria purpurea procumbens.

The root is compoſed of a multitude of thick, irregular, white, and woody fibres: they riſe from a ſmall head, and ſpread themſelves far under the ſurface.

The ſtalks are very numerous, twenty or more riſing from the ſame head of the root: they are round, ſlender, weak, and of a pale colour: they lie ſpread upon the ground about a third part of their length, and riſe irregularly up the reſt.

The leaves are very ſmall, and very numerous: they ſtand thick, and perfectly irregularly upon the ſtalks, and are of a bluiſh green: they have no footſtalks, and they are undivided at the edges, narrow, and pointed at the ends.

The flowers ſtand in long and thick ſpikes at the tops of the ſtalks and branches, and are of a deep purple: they are ſmall, but very pretty; ſometimes they are paler and redder, ſometimes perfectly blue; but their moſt conſtant and natural colour is purple.

The ſeed-veſſels are ſmall, and the ſeeds are very ſmall and black.

It is a native of Spain and of ſome parts of Germany; and flowers in Auguſt. It is moſtly found on hills near ſprings.

C. Bauhine calls it *Linaria carulea repens*. Others, *Linaria purpurea*, and *Oſyris purpuro carulea repens*.

4. Stellated Toadflax.

Stellatis foliis ſtellatis.

The root is very ſlender, divided, and furniſhed with ſmall fibres.

The ſtalks are ſlender, weak, and of a pale green, ſometimes rediſh: they ſtand but weakly upright, and ſeldom are ſtrait; and there generally lie ſeveral others about the root, which ſpread on the ground, and are fuller of leaves, though they bear no flowers.

The leaves are longiſh, narrow, undivided at the edges, pointed at the ends, and of a pale aſh coloured green: they grow round the ſtalks, in the manner of thoſe of the ſtellate plants, like the rowels of a ſpur, or the rays of a ſtar, as they are commonly repreſented.

There are uſually five principal leaves at a joint, and often ſome ſmall ones from their boſoms.

Toward the tops of the principal ſtalks which bear the flowers they grow with leſs regularity, often ſingly, and ſometimes they are in this part irregularly divided.

The flowers ſtand at the tops of the ſtalks in long, thick ſpikes: they are yellow, and like thoſe of the *common toadflax*, only ſmaller.

The ſeed-veſſel is large and round, the ſeeds are ſmall and brown.

It is a native of Sicily, and flowers in July.

Boccone calls it *Linaria ſicula multicaulis mollu-ginis folio*. Others, *Linaria foliis quinis*, or *Toadflax with leaves five at a joint*.

5. Purple mouthed Toadflax.

Linaria flore abeſcente rictu purpureo.

The root is long, ſlender, white, hard, and hung with numerous fibres.

The ſtalks are round, thick, firm, upright, but little branched, and two feet high.

The leaves are numerous, and ſtand irregularly on the ſtalk: they are long and narrow, reſembling that

that of the *common toadflax*, but ſharper at the point, and longer in proportion to their breadth: their colour is a freſh green, and they have no footſtalks.

The flowers ſtand in ſpikes at the tops of the ſtalks, and they are large and beautiful: they are whitiſh, except the opening, which is of a beautiful purple.

It is a native of Italy, and flowers in July.

C. Bauhine calls it *Linaria pallida riſtu purpureo*. Dillenius, and others, *Linaria flore albicante*.

6. Indented-leaved Toadflax.

Linaria foliis dentatis.

The root is long, and furniſhed with many fibres.

The firſt leaves are large; they riſe in a thick tuft, and they remain when the ſtalk is riſen, which is the caſe of few others of the *toadflax* kind.

They are long, broad, of a beautiful green, and have no footſtalks: they are narroweſt at the baſe, broadeſt toward the end, and indented at the edges.

The ſtalk riſes in the centre of theſe, and is round, firm, upright, and a foot and half high: it is of a pale green, and ſometimes branched.

The leaves ſtand irregularly on it, and are not ſo numerous as on moſt of the others: they are long and narrow, and they have no footſtalks: thoſe toward the bottom of the ſtalk are like the radical leaves, but narrower and more deeply dented; thoſe higher up are much deeper divided, and toward the top of the ſtalk they conſiſt only of two ſide-diviſions and a long point.

The flowers ſtand in ſlender ſpikes at the tops of the branches: they are ſmall, and of a deeper or paler blue, and often white.

The ſeed-veſſels are large and round.

It is a native of Italy, and flowers in June.

C. Bauhine calls it *Linaria bellidis folio*. Others, *Linaria odorata*, and *Oſyris odorata purpurea*, or *Linaria odorata purpurea*.

7. Little, blue Toadflax.

Linaria puſilla cærulea.

The root is ſmall and ſlender, and has but few fibres.

The firſt leaves are pinnated, ſmall, and beautiful: they are not very numerous: they ſtand on long footſtalks, and each conſiſts of about three pairs of pinnæ, which are ſmall, oval, and not at all indented.

The ſtalks are ſlender, erect, and ſix or eight inches high: they are not at all branched, and are of a pale yellowiſh green.

The leaves on them are few, and ſtand alternately: they are long, narrow, ſharp-pointed, not at all indented at the edges, and of a pale green: they have no footſtalks, and they grow more pointing upwards than thoſe of the generality of the other ſpecies.

The flowers ſtand in ſpikes at the tops of the ſtalks, and are large and blue.

The ſeed veſſel is ſmall and round; and the ſeeds are large and blackiſh.

It is a native of the ſouth of France, and flowers in May.

Lobel calls it *Linaria annua purpuro cærulea*.

Others, *Linaria minor cærulea*.

8. Blue trifoliate Toadflax.

Linaria trifolia cærulea.

This is a very elegant little plant, and different from the larger trifoliate kind, not only in the colour of the flowers, but in the whole face and aſpect.

The root is long, ſlender, crooked, hard, and hung with a few fibres.

The ſtalks are numerous, weak, and about eight or ten inches high.

The leaves are broad and ſhort on the lower part of the ſtalk, and ſomewhat longer and narrower upwards: they ſtand by threes, and have no footſtalks: their colour is a pale green, and they are not at all indented at the edges.

The flowers ſtand in thick, ſhort ſpikes at the tops of the ſtalks, and are ſmall, and of a beautiful blue.

The ſeed-veſſels are large and roundiſh.

The ſeeds are ſmall and black.

It is a native of Italy, and flowers early in ſpring.

C. Bauhine calls it *Linaria tryphylla cærulea*. Columna, *Linaria cærulea apula*. We, *Blue trifoliate toadflax*.

GENUS III.

SNAPDRAGON.

ANTIRRHINUM.

THE flower conſiſts of a ſingle petal, and has the labiated ſhape: it is formed into a tube, two lips and a palate, and it has no ſpur. The upper lip is divided into two parts, and turned back at the edges: the lower lip is divided into three parts; and the palate is large, and ſhuts up the ſpace between the two lips. The cup is formed of a ſingle leaf, divided into five parts, and remains when the flower is fallen: the ſeed veſſel is a ſingle capſule, of an irregular form, reſembling in ſome degree the head of a calf, whence the plant has an Engliſh name, *calf's ſnout*; and it opens obliquely when the ſeeds are ripe.

Linnæus places this among his *didynamia angioſpermia*; there being two longer and two ſhorter threads in the flower; and the ſeeds being contained in a capſule.

He makes this and the *linaria* the ſame genus, as before obſerved; but the diſtinction, in the want of the ſpur of the flower, and the peculiar ſhape of the ſeed-veſſel, is evident.

It

It is ſingular, that a ſtructure and form in the capſule of this plant, which could ſtrike the common obſerver ſo ſtrongly as to obtain a peculiar name, expreſſing an imaginary reſemblance of the head of an animal, ſhould not have appeared to this curious and nice obſerver of the moſt minute differences, a mark ſufficient for a generical diſtinction.

DIVISION I. BRITISH SPECIES.

Common, ſmall Snapdragon.

Antirrhinum vulgare minus.

The root is long, ſlender, white, crooked, hard, and furniſhed with a few fibres.

The firſt leaves are long and narrow: they riſe in a ſmall tuft, and have no footſtalks: they are undivided at the edges, of a pale yellowiſh green, and quickly fade when the ſtalk riſes.

The ſtalk is round, branched, eight or ten inches high, and of a pale green colour.

The leaves ſtand irregularly, and are not very numerous: they have no footſtalks, and they are oblong, narrow, and of a pale green.

The flowers riſe from the boſoms of the leaves all the way up the ſtalks: they are ſmall, and of a mixed colour, part red, and part whitiſh.

The ſeed-veſſel is large; and, to a fanciful imagination, may eaſily be ſuppoſed to repreſent the head of a calf.

It is common in cornfields, eſpecially where the ſoil is poor and ſandy: It flowers in July.

C. Bauhine calls it *Antirrhinum arvenſe minus.*

It is the only ſpecies of *ſnapdragon* we have properly wild in England. We frequently ſee the *great purple ſnapdragon* upon walls; but that is owing to ſeeds flying up with the wind out of gardens: for it grows naturally in warmer climates.

This ſmall *ſnapdragon* poſſeſſes the virtues of toadflax, but in a very inferior degree.

DIVISION II. FOREIGN SPECIES.

1. Great purple Snapdragon.

Antirrhinum purpureum majus.

The root conſiſts of a great tuft of fibres, riſing from a ſmall head.

The ſtalks are numerous, round, ſmooth, firm, upright, and two foot and a half high; ſometimes they are branched, ſometimes ſingle.

The leaves are numerous and large: they are of a pale green, and are long and broad, not at all divided or indented at the edges, and of a fleſhy, thick ſubſtance.

The flowers grow in long, looſe ſpikes at the tops of the ſtalks and branches: they are very large, and of a beautiful red, ſometimes white, and have the ſpace between the two lips perfectly filled up by a prominent palate.

The ſeed-veſſel is large, and the ſeeds are numerous and ſmall.

It is a native of the ſouth of France. The flowers, in the wild ſtate, vary in colour from the deepeſt purple to the paleſt fleſh colour, and even to white.

J. Bauhine calls it *Antirrhinum vulgare.* C. Bauhine, *Antirrhinum majus alterum folio longiore.* Others, *Antirrhinum purpureum.*

2. Great-flowered yellow Snapdragon.

Antirrhinum flore magno flavo.

The root is long and large, divided into many parts, and furniſhed with a great quantity of fibres.

The ſtalks are numerous, round, thick, firm, upright, and a yard high; ſometimes branched, but more uſually ſingle.

The leaves are large, of a pale green, and hairy: they are broader in proportion to their length than in the former ſpecies, and have footſtalks.

The flowers ſtand at the top of the ſtalk in a thick, ſhort ſpike, and are very large, and of a beautiful yellow.

The ſeed-veſſel is large, and the ſeeds are ſmall and round.

It is a native of the ſouth of France, and flowers in June.

C. Bauhine calls it *Antirrhinum luteo flore.* Camerarius, *Antirrhinum flore luteo majori.* Linnæus ſets this down only as a variety of the preceding ſpecies; but he errs in this. If the colour of the flower were the only difference, we ſhould agree with him in making it no more than a variety, but the leaves differ as much as the reſt of the plant, and the extraordinary bigneſs of the flower is an additional circumſtance: this difference of ſize would not be regarded in a flower, ſingly as a mark of a different ſpecies, any more than a variation in colour; but when other circumſtances eſtabliſh the diſtinction theſe ſupport it.

3. Variegated-flowered Snapdragon.

Antirrhinum floribus variegatis.

The root is ſmall, crooked, and woody.

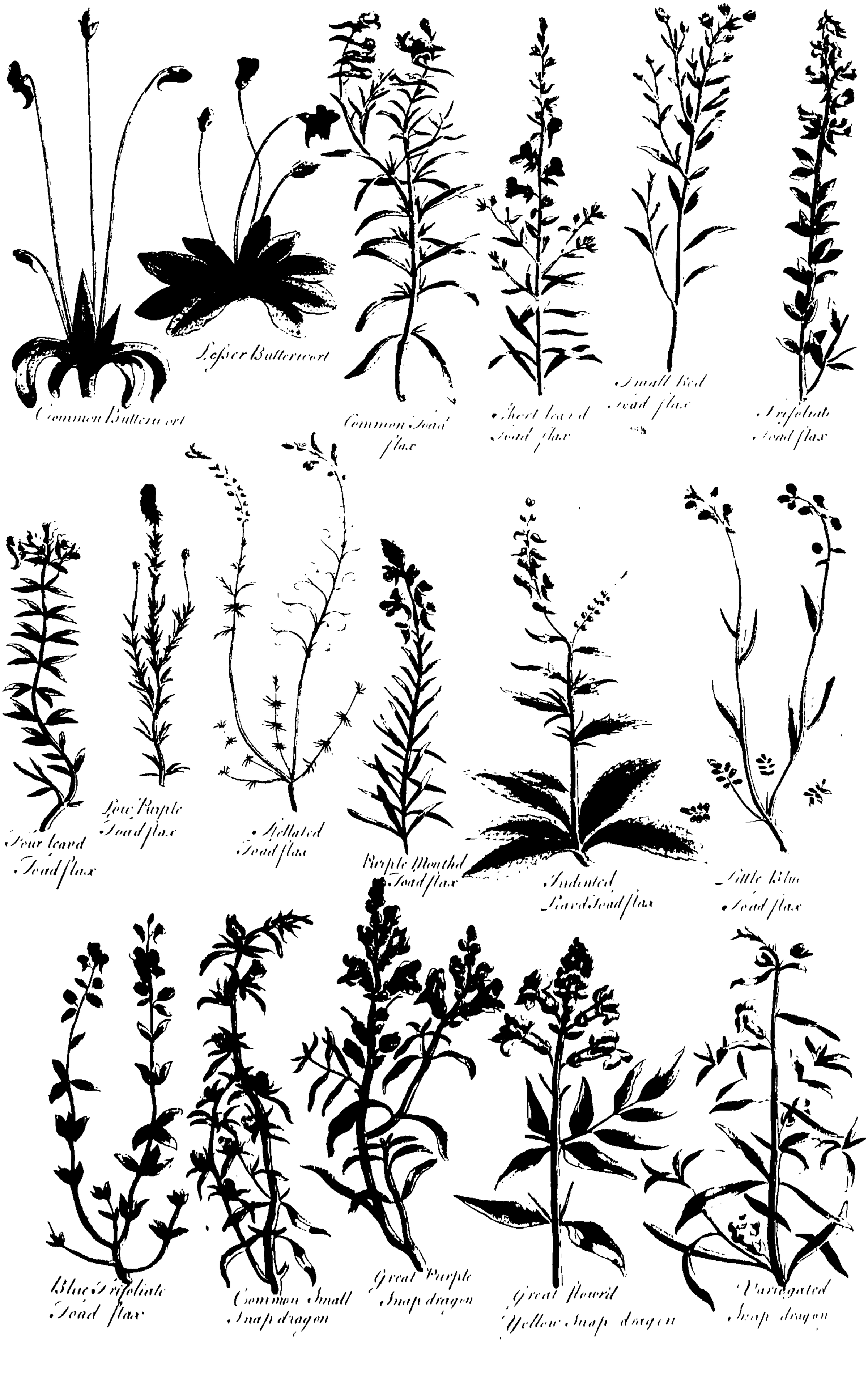
The ſtalks are numerous, round, ſlender, and a foot and half high: they are ſeldom branched, and are of a pale whitiſh green.

The leaves ſtand irregularly, and have no footſtalks: they are long, narrow, ſmooth, and of a pale green, not at all indented at the edges, ſharp-pointed, and more like the leaves of common toadflax than any of the *ſnapdragons.*

The flowers grow all the way up the ſtalks, riſing from the boſoms of the leaves; and they are placed on longiſh, ſlender footſtalks: they are very beautifully coloured; the body of the flower being of a ſnow white, and the edges of a gold yellow.

It is a native of Italy, and flowers in July.

Plate 16



Common Butterwort

Lesser Butterwort

Common Toad flax

Short leaved Toad flax

Small Red Toad flax

Triflolate Toad flax

Four leaved Toad flax

Four Purple Toad flax

Stellated Toad flax

Purple Mouthed Toad flax

Indented Lard Toad flax

Little Blue Toad flax

Blue Trifoliate Toad flax

Common Small Snap dragon

Great Purple Snap dragon

Great flowrd Yellow Snap dragon

Variegated Snap dragon

Dillenius calls it *Antirrhinum flore albo oris luteis.*

All theſe *ſnapdragons* agree in virtues with our common wild kind, operating by ſtool and urine; but, the toadflax poſſeſſing their virtues in a ſuperior degree, they have not come into uſe any where in medicine.

GENUS IV.

FLUELLIN.

ELATINE.

THE flower is ſmall: it conſiſts of a ſingle petal, and is of the labiated kind: it is formed of a tube, with its ſpur, two lips, and a palate between them.

The cup is divided into five parts: the ſeed-veſſel is roundiſh; and, when ripe, ſplits regularly: the ſtalks are weak and procumbent, and the leaves broad and hairy.

This is one of the *didynamia angioſpermia* of Linnæus; the flower having two longer and two ſhorter threads, and the ſeeds being contained in a capſule.

This author does not allow *elatine* to be a diſtinct genus, but confounds this and the *linaria* under one common name and character, with the *antirrhinum.*

The difference between this plant and *linaria*, in flower and ſeed-veſſel, is much leſs than between the *linaria* and *antirrhinum*; and, Mr. Ray, who ſeparates thoſe genera, and gives the characters by which they are diſtinguiſhed, joins this to the *linaria*. However, as the *elatine* is ſufficiently diſtinct in its form and manner of growing, and has its proper and antient name, I have kept it ſeparate. It has diſtinct virtues, as well as a particular appearance, and I ſhall always, on ſuch occaſions, when the flower or ſeed-veſſel do not ſufficiently diſtinguiſh the plant, have recourſe to the ſtalks, leaves, or other obvious and eſſential parts, for the ſupporting the antient and uſeful diſtinctions.

There are but two known ſpecies of this genus, and both are natives of Britain.

1. Round-leaved Fluellin.

Elatine folio ſubrotundo.

The root is ſmall, white, divided, and furniſhed with numerous fibres.

The firſt leaves are moderately large, and nearly round, only terminating in a kind of point: they ſtand on long, ſlender, hairy footſtalks, and are ſoft to the touch, and of a pale greyiſh green.

The ſtalks are numerous, ſlender, round, weak, and ſix or eight inches long.

They do not ſtand erect, but trail and hang upon the ground.

The leaves are ſmall, and ſupported on ſlender footſtalks: they are of a pale green, and hairy.

Thoſe toward the bottom of the ſtalk are roundiſh, and reſemble thoſe from the root: thoſe toward the top are narrower, and oblong.

The flowers are ſmall, and of a mixt yellowiſh and dark purple colour: they reſemble thoſe of toadflax, and have a long ſpur.

The ſeed-veſſel is ſmall and roundiſh, and the ſeeds are very minute and brown.

We have it in cornfields, but it is not common.

It flowers in June.

C. Bauhine calls it *Elatine folio ſubrotundo.* Ray, *Linaria elatine dicta folio ſubrotundo.* We call it *Female fluellin.*

2. Cornered-leaved fluellin.

Elatine folio acuminato.

The root is ſmall and inconſiderable.

The firſt leaves are numerous, ſmall, and placed on long footſtalks: they are oblong, and ſomewhat of an arrow-headed ſhape, but that the corners do not bend backwards, but ſtand flat or forward.

The ſtalks are numerous, very ſlender and weak, and conſiderably branched: they are hairy, of a pale whitiſh green, eight or ten inches long, and lie upon the ground.

The leaves ſtand irregularly, and at conſiderable diſtances: they are large, hairy, of a very pale green, and cornered toward the baſe.

The flowers are ſmall, and are of a mixt colour between yellowiſh and a deep purple: they are very pretty though ſmall.

It is common in our cornfields, and flowers in July.

C. Bauhine calls it *Elatine folio acuminato in baſi auriculato flore luteo.* Ray, *Linaria elatine dicta folio acuminato.*

Fluellin is famous as a vulnerary.

The juice of it cleanſes and heals old ulcers, and it has at all times been in eſteem as a good inward medicine for internal bruiſes. The tops, beaten into a conſerve, are the beſt way of taking it for this purpoſe; but at preſent they are not much uſed.

GENUS V.

CYMBALARIA.

THE flower conſiſts of a ſingle petal, and is of the labiated kind: it is formed into a tube, with a ſpur behind; two lips; and a palate cloſing the ſpace between them.

The ſeed-veſſel is ſmall and round.

The ſtalks are procumbent or hanging, and the leaves are cornered and ſmooth.

Linnæus places this among his *didynamia angioſpermia*; the flower having four threads in it, two longer, and two ſhorter, and the ſeeds being contained in a capſule.

He does not allow it to be a diſtinct genus, but makes it, as well as all the *linaria* and *elatine*, ſpecies of *antirrhinum* or *ſnapdragon*.

The flower and ſeed-veſſel of this genus agree with thoſe of the *linaria*; but the manner of growth and form of the leaves are perfectly diſtinct: it has alſo an antient and received name, which I have therefore preſerved, as there is ſufficient diſtinction.

If generical characters are to be taken ſolely from the flowers and ſeed-veſſels of plants, this is a ſpecies of *linaria*, however different it be in the general form and aſpect; but there are no laws, eſtabliſhed on that head, on an inviolable authority: if the leaves and other parts of plants may, when there is occaſion, be taken into the generical character, this is a perfectly diſtinct genus.

Nothing tends more to perplex the ſtudent than multiplication of ſpecies under the ſame generical name: on the other hand, nothing more facilitates the ſtudy than a ſufficient number of genera. I write to make the ſcience familiar.

There is but one known ſpecies of this genus, and that is a native of Britain, though not very common.

Ivy-leaved Cymbalaria.

Cymbalaria foliis hederæ.

The root is compoſed of a multitude of fibres, riſing from a ſmall head.

The firſt leaves are large, ſhort, broad, and cornered in two or three parts near the baſe; each of theſe corners, and the main body of the leaf, alſo terminate in ſharp points: the whole leaf is of a deep green colour and gloſſy ſurface, and ſtands on a ſlender purpliſh footſtalk.

The ſtalks are numerous and weak: they lie upon the ground, or upon the ſurface of a wall: they are a foot or more in length, not much branched, and are of a deep purpliſh colour.

The leaves ſtand irregularly on them, and have long, ſlender footſtalks.

They are broad, cornered, and ſharp-pointed, and are of a ſmooth ſurface, and deep, gloſſy green.

The flowers are very numerous and ſmall: they riſe from the boſoms of the leaves all the way up the ſtalk, and are ſupported on long, ſlender pedicles: they reſemble thoſe of fluellin in ſhape, but are of an uniform pale red colour.

The ſeed-veſſel is ſmall and roundiſh: the ſeeds are numerous and black.

It is a native of our northern counties, and flowers in June. We ſee it wild on the walls of the Thames about Batterſea, and on the walls of the apothecaries phyſick garden in Chelſea; but in both theſe places it has doubtleſs riſen from ſeeds or parts of the plant thrown out from that or from ſome other garden.

C. Bauhine calls it *Cymbalaria*. Others, *Linaria hederacco folio glabro*.

It is cooling and aſtringent.

A conſerve made of the leaves is good in the overflowing of the menſes, in ſpitting of blood, in diarrhæas with ſharp and bloody ſtools, and in the fluor albus.

GENUS VI.

FIGWORT.

SCROPHULARIA.

THE flower conſiſts of a ſingle petal, and is of an irregular figure, ſomewhat approaching to the labiated kind, and open: it is formed into a large, rounded tube, and a very ſmall edge: the edge is divided into five ſegments; two ſtand uppermoſt, and are large; two ſtand ſide-ways, and ſpread open; and the fifth is undermoſt, and turns back.

The cup is divided into five parts; and the ſeed-veſſel is roundiſh.

Linnæus places this among his *didynamia angioſpermia*; the threads in each flower being four, two longer, and two ſhorter; and the ſeeds contained in a capſule.

DIVISION I. BRITISH SPECIES.

1. Common Figwort.

Scrophularia vulgaris.

The root is long and thick, and has a great quantity of ſmall, tuberous pieces growing to it.

The ſtalk is ſquare, firm, upright, and three foot high: it is not much branched, and is uſually of a brown colour.

The leaves ſtand in pairs, and are large and beautiful: they have long footſtalks, and are broad, oblong, and of a deep green colour, and very frequently brown, as is alſo the ſtalk: they are broadeſt toward the baſe, ſharp at the point, and indented at the edges.

The flowers ſtand at the tops of the ſtalk and branches, and are ſmall, and of a deep duſky colour, with a mixture of greeniſh: they open wide at the mouth, and ſhew the buttons on the tops of the threads, which are of a deep yellow.

The ſeed-veſſel is large, rounded, and ſharp at the top.

The ſeeds are numerous and ſmall.

It

It is common in woods, and in damp, ſhady places.

It flowers in July.

The whole plant has a ſtrong and diſagreeable ſmell, eſpecially when in flower.

C. Bauhine calls it *Scrophularia nodoſa fœtida*, from the tuberous knots about its root, and its ſtrong ſmell. Others, *Scrophularia vulgaris*.

It is famous as a remedy for the evil: the method is to take a ſtrong decoction of the roots daily for a great length of time. Theſe long and tedious cures are leſs certainly to be judged of than thoſe performed more ſpeedily; but there ſeems great authority to believe that this is a powerful and excellent medicine.

In ſome places there is a cuſtom of brewing drink with ſome of this herb among it; and this root is celebrated for its virtues againſt the ſcurvy. When freſh, it gives the beer a moſt diſagreeable taſte; but this is not much perceived when uſed dry.

It is famous alſo, both inwardly and outwardly, againſt the piles.

The ſingular form of the tuberous parts about the root led people to think of it as a remedy in this diſorder, becauſe they were ſuppoſed to reſemble thoſe ſwellings; and, experience has ſhewn, the plant has the virtues they imagined.

A ſtrong decoction of the root is good againſt all foulneſſes of the ſkin, the itch not excepted: it ſhould be taken inwardly, and the parts waſhed with ſome of it alſo warm.

An ointment is made in ſome places of the leaves, boiled in lard, and uſed for the ſame purpoſes; but the decoction, or a putlice, made from the freſh root, boiled ſoft with bread and milk, will anſwer the purpoſe better.

2. Water figwort, called Water betony.

Scrophularia aquatica.

The root is compoſed of a great number of fibres.

The firſt leaves are large, broad, oblong, and bluntly indented: they riſe in a little tuft, and each has its ſeparate long footſtalk: they have ſome reſemblance of the leaves of wood betony; they are vaſtly larger, but from this the plant has been commonly called *water betony*.

The ſtalk is thick, firm, upright, ſquare, hollow, and three foot high: it is alſo edged with a kind of wings, running from the footſtalks of the leaves, and is uſually of a brown colour.

The leaves ſtand in pairs, and they have long footſtalks.

They reſemble thoſe from the root, and are of a pale green colour: they are oblong, bluntly indented, and terminate in a rounded end; and ſometimes there grow a couple of ſmaller leaves on the footſtalk below their baſes.

The flowers are ſmall, and of a deep purple, and have yellow buttons to their four threads within.

The ſeed-veſſel is large and rounded; and the ſeeds are ſmall and brown.

It is common by ditch ſides; and flowers in July.

C. Bauhine calls it *Scrophularia aquatica major*. J. Bauhine, *Scrophularia maxima radice fibroſa*. The common writers call it *Betonica aquatica*.

It is ſaid to poſſeſs the ſame virtues with the former, but in a leſs degree.

3. Small-leaved Figwort.

Scrophularia foliis minoribus.

The root is long, [illegible] and full of little tuberous lumps: it runs [illegible] under the ſurface, like that of the common figwort, and is of a whitiſh colour, with a tinge of redniſh.

The ſtalk is firm, ſquare, of a yellowiſh green, and two foot high.

The leaves ſtand in pairs: they are broad and ſhort, lightly hairy, and indented ſharply at the edges: they are thick, firm, and of a pale green.

The flowers ſtand at the tops of the ſtalks, and are large, and of a deep duſky colour.

The ſeed-veſſel is large and round; and the ſeeds are ſmall, very numerous, and brown.

It is found on our weſtern coaſts; and flowers in Auguſt.

Ray calls it *Scrophularia ſcorodoniæ folio*, from its leaves having ſome reſemblance of thoſe of wood ſage.

4. Green-flowered Figwort.

Scrophularia floribus vireſcentibus.

The root is large, thick, long, and full of tuberous knobs: it runs obliquely under the ſurface, and is of a whitiſh colour.

The ſtalk is ſingle, firm, upright, ſquare, of a pale green colour, and two foot and a half high.

The leaves are large, and ſtand in pairs: they have long footſtalks, and are broadeſt at the baſe, ſharp at the point, and indented at the edges.

The flowers are ſmall, and of a greeniſh colour, with four yellow buttons on the threads in the centre.

The ſeed-veſſels are large and roundiſh.

It is found in Oxfordſhire and the adjacent counties; and flowers in June.

Ray calls it *Scrophularia major foliis caulibus, et floribus viridibus.*

DIVISION II. FOREIGN SPECIES.

1. Yellow-flowered Figwort.

Scrophularia flore luteo.

The root is long and thick: it runs obliquely under the ſurface, and has numerous large fibres; but none of thoſe fleſhy tubercles that grow to the common kind.

The firſt leaves are large and hairy; eight or ten of them riſe from the root, and they are ſupported on long, hairy footſtalks: they are broad and ſhort, of a heart-faſhioned ſhape, deeply ſerrated, and of a duſky green.

The ſtalk is ſquare, firm, erect, and two feet high; and is of a browniſh green, and hairy.

The

The leaves ſtand uſually in pairs, but ſometimes three riſe from the ſame point.

They are of a heart-faſhioned ſhape, ſhort and broad, and dented round the edges.

The flowers ſtand ſeveral together on ſhort footſtalks riſing from the boſoms of the leaves; and they are ſmall and yellow.

The ſeed-veſſel is large and roundiſh; and the ſeeds are numerous and ſmall.

It is a native of Italy, and flowers in June.

C. Bauhine calls it *Scrophularia flore luteo.* Cluſius makes it a kind of *dead nettle*: he calls it *Lamium pannonicum ſecundum.*

2. Jagged yellow Figwort.

Scrophularia lutea laciniata.

The root is long, thick, oblique, and furniſhed with numerous fibres.

The leaves that riſe firſt from it are very large, and deeply divided: they ſtand on long footſtalks, and are of a beautiful green.

The ſtalk is firm, erect, brown, and two feet and a half high.

The leaves ſtand in pairs, and are large, and deeply ſerrated: they have frequently two appendages or ſmall leaves growing on their footſtalk near the baſe, in the manner of thoſe of the *common water figwort.*

Thoſe toward the bottom of the ſtalk approach more to the diviſions of thoſe from the root; and thoſe near the top are longer and narrower, and very deeply and ſharply jagged.

The flowers are large and yellow, and ſtand ſeveral together on footſtalks riſing from the boſoms of the leaves.

The ſeed veſſels are large and roundiſh; and the ſeeds are numerous and ſmall.

It is a native of Spain and Portugal, and flowers in July.

C. Bauhine calls it *Scrophularia foliis laciniatis.* Others, *Scrophularia ſambuci folio flore magno.*

4. Nettle-leaved Figwort.

Scrophularia urticæ folio.

The root is long and thick, and has many large fibres.

The ſtalk is ſquare, firm, and lightly hairy, very much branched, and two feet high.

The leaves ſtand in pairs, and have long footſtalks: they are large, and of a ſhining green, broad at the baſe, narrower to the point, and indented ſharply all the way on the edges.

The flowers are placed all the way up the ſtalk and branches, and have long footſtalks; each of which ſplits toward the top, and holds two flowers: they are large, and of a bright red.

The ſeed-veſſel is large, roundiſh, and pointed; and the ſeeds are numerous and ſmall.

It is a native of Italy, and flowers in May.

C. Bauhine calls it *Scrophularia urticæ folio*; and moſt others have followed him.

5. Pinnated Figwort.

Scrophularia foliis pinnatis.

The root is long, thick, and hung with many large fibres.

The leaves that riſe firſt from it are long, narrow, and deeply divided at the edges, the cuts going almoſt to the middle rib: they have no footſtalks, and are of a ſhining, deep green.

The ſtalks are numerous, firm, upright, and of a deep brown: they are ſcarce at all branched, and are a foot and half high.

The leaves ſtand on them in pairs, and are deeply divided; ſo that they appear pinnated: each ſeems compoſed of about three pair of pinnæ, with an odd one at the end, and theſe are deeply jagged.

The flowers ſtand on the tops of the ſtalks, and are very numerous, ſmall, and of a dark purple colour.

The ſeed-veſſels are large, roundiſh, and pointed; and the ſeeds are ſmall and brown.

It a native of Italy and Germany; and flowers in July.

C. Bauhine calls it *Scrophularia ruta canina dicta.* The common writers call it *Ruta canina*, and *Dogs rue.*

All theſe ſpecies of *figwort* have the ſame kind of taſte, and moſt of them the ſame ſmell with our common wild kind; and they are celebrated for the ſame virtues. They are accounted great medicines againſt ſcorbutick and other foulneſſes; and pultices of their leaves are made for the piles. The common wild kind of our woods ſeems to have more virtue than any of them, though natives of warmer climates.

GENUS VII.

FOXLOVE.

DIGITALIS.

THE flower conſiſts of a ſingle petal, which is long and hollow like the finger of a glove, and is divided into four ſegments at the edge, remotely approaching to the labiated form; the upper lip is broad and divided, and the under one larger: the cup is divided into five ſegments; and the ſeed-veſſel is large, of an oval form, and pointed at the top.

Linnæus places this among his *didynamia angioſpermia*; the threads in each flower being four, two of which are longer and two ſhorter, and the ſeeds contained in a capſule.

This diſtinction of that celebrated author compriſes ſo many of the plants properly of our preſent claſs, that it ſhews how nature is ſimilar, even in the ſmalleſt parts, in plants allied to one another: but this is all that ſhould have been inferred from the curious and juſt obſervation of that writer, of the threads in each flower being four, and two of them longer and two ſhorter: when he carried this obſervation into a larger uſe, and made it the foundation of a claſs, it failed him, and miſled his readers.

Round leaved Shadlin

Emerid leaved Shadlin

Cymbalaria

Common Spignel

Water Spignel or wild water Parsnip

Small leaved Spignel

Yellow Somerset Spignel

Jagged Yellow Spignel

Wild Leaved Spignel

Pinnated Spignel

Common Sengreen

Serrinated Sengreen

Yellow Kingston

Great Yellow Kingston

Perfoliate Kingston

Shadlike Kingston

Narrow leaved Sedge Kingston

We ſee, that in bringing it to ſerve that purpoſe, the claſs formed upon it comprehends the verticilate plants, and theſe together; and as it in that joins genera the moſt diſtinct, ſo it in other caſes ſeparates the *pinguicula* and others, which are naturally allied to the reſt, and here brought together.

The world is indebted in the higheſt degree to that moſt eminent writer for his obſervations; and they ſhould be always remembered, though uſed in a more limited degree.

DIVISION I. BRITISH SPECIES.

Common Foxglove.

Digitalis purpurea.

The root is compoſed of a multitude of thick and tough fibres; of a pale green colour, and bitter taſte.

The firſt leaves are very large, oblong, narrow, of a whitiſh colour, and ſlightly indented at the edges.

The ſtalk riſes in the centre of theſe, and is round, thick, firm, upright, whitiſh, or greyiſh, and four feet high.

The leaves on it are numerous, and ſtand irregularly: they are long, narrow, large, of a whitiſh green, and indented ſlightly on the edges.

The flowers grow in a kind of ſpike on the top of the ſtalk, and they uſually hang all on one ſide: they are large, and of a beautiful red, with ſome ſpots of white and ſome little touches of black, and with yellow buttons on the four threads within.

The ſeed-veſſel is large and oval; and the ſeeds are numerous and ſmall.

It is common in barren paſtures and on dry banks, and flowers in Auguſt.

C. Bauhine calls it *Digitalis purpurea folio aſpero*. Others, *Digitalis vulgaris*, and *Digitalis purpurea vulgaris*.

It is a plant poſſeſſed of very conſiderable virtues; but they are more known among the country people than in the ſhops.

It is a powerful emetick, and, in a ſmaller doſe, a very briſk purge: often it works both ways, and ſometimes with a very hurtful violence; but this is owing to ill management: many excellent medicines, as they are found to be, in the hands of ſkilful perſons, would fall under this cenſure if given in the ſame random manner.

The people in the weſt of England uſe it moſt. They boil a handful of the leaves, or three or four of the cluſters of roots, in ale, and give it according to the patient's ſtrength. They cure quartan agues, and many other obſtinate complaints with it.

We have alſo accounts of epileptick fits of long continuance being cured by it; but the operation in this way is too rough for any but thoſe who are very hardy.

It would be right to try the root, dryed and powdered, in a moderate doſe, for it is very improper that a medicine of ſo much power ſhould be diſregarded at home, while we ſend to the remoteſt parts of the earth for others of the ſame qualities.

An ointment made of the leaves is recommended for cutaneous foulneſſes, and in many places they make an ointment alſo of the flowers in May butter, which is greatly recommended in ſtrumous caſes.

The Italians are ſo fond of it on theſe occaſions that they have a proverb, which ſay, *foxglove cures all wounds*. Many plants of leſs virtue are more celebrated; and there is none deſerves better a fair trial.

DIVISION II. FOREIGN SPECIES.

1. Ferrugineous Foxglove.

Digitalis flore ferrugineo.

The root is compoſed of numerous thick fibres.

The firſt leaves are long and large; they have thick ribs, and are of a pale green.

The ſtalk is round, robuſt, upright, and four feet high.

The leaves on it are numerous, and placed irregularly: they are long, narrow, without footſtalks, of a pale green, and very lightly hairy.

The flowers are extreamly numerous: they ſtand in long ſpikes at the tops of the ſtalks and branches; and are of the ſhape of the *common foxglove* flowers, but that they have a very long under lip: their colour is a ferrugineous, or browniſh red, and they have ſtreaks of yellow, and are in part hairy.

The ſeed-veſſel is ſmall, and the ſeeds are ſmall and brown.

It is a native of the eaſt. We received the ſeeds from Conſtantinople, but it is common in our gardens.

It flowers in Auguſt.

C. Bauhine calls it *Digitalis anguſtifolia flore ferrugineo*. Others, *Digitalis ferruginea*.

2. Yellow Foxglove.

Digitalis flore minore.

The root is very long and thick, and has a vaſt quantity of fibres.

The firſt leaves riſe in a great cluſter, and are long and broad; of a bright green on the upper ſide, but paler and a little inclined to hairyneſs below: they have no footſtalks, and they are narrow toward the baſe, and broadeſt near the end.

The ſtalk is round, upright, firm, and three feet high.

The leaves on it are numerous, and grow irregularly: they are long, and not very broad, and they have no footſtalks.

The flowers ſtand in a long ſpike on the top of the ſtalk, and are of a pale greeniſh yellow.

The ſeed-veſſel is large, roundiſh, and pointed at the top.

It is a native of Spain and Italy, and flowers in July.

C. Bauhine calls it *Digitalis major lutea ſive pallida parvo flore.*

3. Great-flowered yellow Foxglove.

Digitalis lutea magno flore.

The root is very large, and runs obliquely under the ſurface, ſending up from various parts cluſters of leaves, and numerous ſtalks.

The leaves that riſe from the root are broad, oblong, and of a pale green, and a little dented at the edge.

The ſtalks are round, ſtriated, of a pale colour, firm, upright, and three feet high.

The leaves are numerous upon them, and ſtand irregularly, but not ſo confuſedly as on ſome of the other ſpecies: they are broad, oblong and without footſtalks.

The flowers ſtand in a kind of ſpike at the top of the ſtalk; and they uſually hang all one way, as in the *common foxglove*: they are large and yellow, and are of the ſhape of thoſe of the common kind: their colour is pale on the outſide and deep within, and is ſometimes variegated.

It is a native of Germany, and flowers in Auguſt.

C. Bauhine calls it *Digitalis lutea magno flore.*

J. Bauhine *Digitalis lutea flore majore folio latiore.*

4. Perfoliate Foxglove.

Digitalis perfoliata.

The root is large and irregularly ſhaped, and ſends out many long and thick fibres.

The ſtalk is round, firm, upright, and two feet and a half high, of a pale green, and ſcarce at all branched.

The leaves ſtand in pairs, and the ſtalk in a manner runs through them: they are large and long; broadeſt at the baſe, and ſmaller all the way to the point: they are ſmooth, perfectly undivided at the edges, and of a bright green.

The flowers ſtand at the top of the ſtalk, and on long footſtalks riſing from the boſoms of the upper leaves: they are large, and extreamly beautiful: their colour is a deep violet purple: they are hollow and long, in the manner of the *common foxglove*; but they are divided into five ſhort and round ſegments at the edge.

The ſeed-veſſel is oval, and terminates in a point: the ſeeds are ſmall and brown.

It is a native of Virginia, and flowers in July.

Moriſon calls it *Digitalis perfoliata flore violaceo.* Linnæus calls this *Mimulus*, making it another genus; but that is a needleſs diſtinction.

5. Shrubby Foxglove.

Digitalis fruteſcens.

The root ſpreads under the ſurface, and ſends up ſhoots in various places.

The ſtalks are woody, and covered with a reddiſh brown bark.

The leaves ſtand irregularly and in conſiderable numbers upon them; and are very beautiful: they have no footſtalks, but grow to the main ſtalk by a broad, hollow baſe: they are long, narrow, of a bright green, and beautifully indented on the edges: they are broadeſt toward the middle, and terminate in a ſharp point.

The flowers ſtand at the tops of the ſtalks in very long ſpikes: they are of a beautiful gold yellow, and have two lips; and the four threads, with the buttons, very apparent in them.

The ſeed-veſſel is large and oval; and the ſeeds are numerous, ſmall, and brown.

It is a native of the Canaries, and flowers in May.

Cliffort calls it *Geſneria foliis lanceolatis ſerratis pedunculo terminaci laxe ſpicato.* Commeline, *Digitalis acanthoides canarienſis flore aureo fruteſcens.*

GENUS VIII.

HEDGE HYSSOP.

GRATIOLA.

THE flower conſiſts of a ſingle petal, approaching to the labiated ſhape: the tube is angulated: the edge divided into four parts: the upper ſegment is broader than the others, and turns back; the others are equal: the cup is divided into five ſegments; and the ſeed-veſſel is oval, and terminates in a point.

Linnæus places this among his *diandria monogynia*; there being two fertile threads in the flower, and the filament from the rudiment of the ſeed-veſſel being ſingle.

There is, however, ſome conſtraint upon his ſyſtem in this inſtance: the general character of his claſs of the *diandria* is, that there are only two ſtamina in the flower, with the rudiment of the fruit; * but in this plant there are really five ſtamina in each flower: three of them have no buttons on the top: theſe, therefore, he calls ſteril, and accounts as nothing.

Many have been puzzled to know where to place this plant.

We ſee how Linnæus diſpoſes it; he ſeparates it many claſſes from the reſt of the genera here treated of, to which it evidently belongs; having a flower conſiſting of a ſingle petal, and the ſeeds contained in a ſingle capſule. It is ſo nearly allied to the foxglove that ſome have called it by that name, but erroneouſly; for, though allied, it is a diſtinct genus. Its proper place, in an arrangement of the plants to which it is of kin, is next to the foxglove, which it moſt reſembles.

* Stamina duo in flore hermaphrodito. *Syſt. Nat.*

DIVISION

DIVISION I. BRITISH SPECIES.

Narrow-leaved Hedge Hyſſop.

Gratiola anguſtifolia.

The root is long, ſlender, and white: it ſpreads under the ſurface, and ſends up numerous ſhoots.

The ſtalk is round, thick, upright, and eight or ten inches high: it is not at all branched, and is uſually of a rediſh colour near the ground, and of a pale green elſewhere.

The leaves ſtand in pairs: they have no foot-ſtalks: they are oblong, ſerrated at the edges, and ſharp pointed.

The flowers ſtand ſingly on long, ſlender foot-ſtalks riſing from the boſoms of the leaves; and are of a mixed white and yellow colour.

The ſeed-veſſel is large, oval, and pointed; and the ſeeds are numerous, ſmall, and duſky.

It is a native of the north of Scotland, but not common. It grows in places where waters have ſtagnated in winter.

It flowers in June.

C. Bauhine calls it *Gratiola centauroides*. Others, *Gratiola vulgaris*.

It is but lately we have the notice of its being a native of Britain; nor have we any other ſpecies of it: that which is called the *ſmaller hedge byſſop*, *ſalicaria byſſopifolia* by C. Bauhine, and by leſs accurate writers *gratiola anguſtifolia*, is properly a ſpecies of *ſalicaria*, not of this plant.

There are alſo two other plants called by the name *gratiola*, which are ſpecies of *caſſida*, and will be found under that head.

This is ſuch a ſource of error to the young ſtudent, that there cannot be too much care in avoiding it: he is to know, that till this *proper gratiola*, which is here deſcribed, was found in Scotland, it was not known that any ſpecies of that genus was native of Britain; and, he muſt obſerve, that the plants named by Mr. Ray with theſe ſynonyma of *gratiola* are neither of them of that kind; nor ſo underſtood by Mr. Ray, who has placed them ſeverally in their proper genera, though he has added the different names by which they have been called by other writers, and theſe among them.

Hedge byſſop, though not known before wild in Britain, is very common in France, and is greatly eſteemed for its medicinal virtues.

It approaches to the nature of the foxglove in qualities as well as form. Taken in a moderate doſe, it operates very briſkly by ſtool; and, in a ſomewhat larger, by vomit alſo; and in this manner, for conſtitutions that can bear it, carries off watery humours and diſlodges obſtructing matter in a ſurpriſing manner.

The juice is given in dropſies: a ſtrong decoction in the jaundice; and in ſlighter caſes an infuſion. Either way it is bitter, and diſagreeable in the higheſt degree, to the taſte; but its virtues are ſo well known among the French peaſants that it is called there *poor mens phyſick*.

The root, dried and powdered, is given in the ſciatica, and with ſucceſs. In ſmall doſes it is alſo excellent againſt worms: its extream bitter taſte deſtroys them, and by its purging quality it takes off all that matter from the coats of the inteſtines which uſed to harbour and ſerve for lodging of them.

DIVISION II. FOREIGN SPECIES.

Blunt-leaved Hedge Hyſſop.

Gratiolis foliis obtuſis.

The root is ſlender and creeping: it is white, tough, furniſhed with many fibres, and of a bitter taſte.

The ſtalk is round, upright, and of a pale green; often rediſh toward the ground, as alſo at the inſertions of the leaves.

The leaves ſtand in pairs, and are oblong, narrow, and of a dead green: they are very ſlightly and irregularly notched at the edges, and obtuſe at the ends.

The flowers are large.

The ſeed-veſſels are alſo large, and the ſeeds are ſmall and brown.

It is a native of many parts of North America, and flowers from May to October.

Gronovius calls it *Gratiolo foliis lanceolatis obtuſis ſubdentatis*.

It is very much of the ſame taſte with the common kind, and probably poſſeſſes the ſame virtues. The Indians extol it againſt poiſons.

GENUS IX.

COXCOMB.

PEDICULARIS.

THE flower conſiſts of a ſingle petal, and approaches to the labiated kind: it is formed into a tube, and two lips: the tube is crooked, and the lips differ from one another greatly: the upper lip is narrow, compreſſed, dented, and galeated; the lower lip is divided into three ſegments, of which the middle one is the narroweſt: the cup is roundiſh and ſwelled, and is divided into five ſegments at the rim: the ſeed-veſſel is roundiſh, and pointed at the top.

Linnæus places this among the *didynamia angioſpermia*; the threads in each flower being four, two longer, and two ſhorter, and the ſeeds contained in a capſule.

We confuſedly call two genera in Engliſh by the name of *rattle*, diſtinguiſhng them only by epithets taken from the colour of the flower into *red* and *yellow rattle*: this is one of them, the following genus the other: they are alſo called *coxcomb*, and *louſewort*; but both theſe names are given in common to the two genera, and have been uſed to the ſame diſtinction by an epithet expreſſing the colour of the flower: we call them *red coxcomb*, and *yellow coxcomb*, as well as *rattle*; and ſome, though that be not ſo univerſal, *red* and *yellow louſewort*; this diſagreeable name is more confined to *red*, but not ſufficiently to make it a generical term diſtinct from the other.

It will be ſeen there is a *yellow-flowered pedicularis*; therefore another name is needful, and we call this *coxcomb*. It will be proper for the ſtudent either to uſe this conſtantly, or always to call them by their Latin names; thoſe being ſingle and diſtinct words.

DIVISION I. BRITISH SPECIES.

1. Common red Coxcomb.

Pedicularis rubra vulgaris.

The root is long, thick, and divided into ſeveral parts: it is white and bitter.

The firſt leaves are large, broad, indented at the edges, and pointed at the ends: they are ſo unlike thoſe that follow that few would know the plant in this ſtate.

The ſtalks are thick, green, weak, and not very upright: they are eight or ten inches long, and but little branched.

The leaves ſtand on them in great numbers, and are of a kind of pinnated form, each compoſed of ſeveral pairs of ſmaller, ſet on a middle rib, with an odd one at the end; and ſome of the loweſt are often doubly pinnated.

The flowers ſtand in a conſiderable number on the tops of the ſtalks: they are large, of a bright red, and have a great hollow cup: ſometimes they are white: their cups are long, angulated, and ſmooth.

The ſeed-veſſel is large and roundiſh; and the ſeeds are numerous and ſmall.

It is common in damp places on heaths, and flowers in July.

C. Bauhine calls it *Pedicularis pratenſis purpurea*. Dadonæus, *Fiſtularia*. Others, *Pedicularis rubra vulgaris*.

2. Tall red Coxcomb.

Pedicularis rubra elatior.

The root is thick, large, and ſpreading, whitiſh, bitter, and full of fibres.

The firſt leaves are large, few in number, and not much divided.

The ſtalks are round, green, thick, robuſt, upright, and a foot and half high.

The leaves are large, deeply divided in the pinnated manner, and of a pale green, often rediſh.

The flowers are large, and uſually red, but ſometimes, as in the other ſpecies, they are white.

The cups are not ſo bloated as in the other ſpecies; and they are rough on the ſurface: uſually they are divided only into two parts, inſtead of five, at the extremity; but this is uncertain.

The ſeed-veſſel is large, and the ſeeds are ſmall and brown.

It is not uncommon in wet places, and flowers in July.

Tragus calls it *Pedicularis campeſtris prior ſpecies*. Ray, *Pedicularis rubra elatior*.

The virtues of theſe plants are not certainly known; but our farmers have an opinion that ſheep feeding on them become ſubject to vermin, whence the Engliſh name *louſewort*: whatever foundation there may be for this, it is an opinion as old as Tragus; and is not confined to Britain, for the Flemiſh have it as well as we.

DIVISION II. FOREIGN SPECIES.

Yellow Coxcomb.

Pedicularis foliis pinnatis lutea.

The root is compoſed of a multitude of very large and thick fibres, and is whitiſh, tough, and bitter.

The firſt leaves are large, long, and divided deeply to the rib in a pinnated manner: they ſeem compoſed of many pairs of leſſer ones, with an odd one at the end; but, nearer examined, theſe are only ſegments; and they are notched deeply at the edges, and pointed at the ends.

The ſtalk is round, thick, hollow, rediſh, and two feet high.

The leaves ſtand irregularly on it, and are, like thoſe from the root, divided deeply in the pinnated manner, and ſometimes they are compoundly pinnated, or the ſegments themſelves divided in the ſame pinnated manner.

The flowers ſtand in a tuft at the top of the ſtalk; and are large, and of a pale yellow, and ſometimes white: they make a thick, ſhort ſpike, in the manner of the orchis flowers, and the upper ſegment or galea is very crooked.

The ſeed-veſſel is large, and the ſeeds very ſmall and brown.

It is a native of Italy, and of many other parts of Europe; and flowers in June.

Authors have been greatly divided as to the genus to which it belonged, and have thence called it by various names.

Barrelier calls it *Alectorolophus montana flore luteo*. C. Bauhine, *Filipendula montana flore pedicularis*: Others, *Filipendula montana*.

GENUS

GENUS X.

YELLOW RATTLE.

RHINANTHUS.

THE flower conſiſts of a ſingle petal, and approaches to the labiated kind: it is formed into a tube and two lips: the tub is ſtrait: the lips are compreſſed at the baſe; and the upper one is flatted, and of the galeated ſhape: the under lip is flat, and divided into three ſegments, of which the middle one is the longeſt: the cup is roundiſh, ſwelled, as if blown up, and divided into four parts at the edge: the ſeed-veſſel is rounded, and compreſſed or flatted; and the ſeeds alſo are flatted.

Linnæus places this among the *didynamia angioſpermia*; the filaments or threads in each flower being four, two of which are longer, and two ſhorter, and the ſeeds contained in a capſule.

We have obſerved that this genus and the *pedicularis* have been always called by the ſame Engliſh names. We have ſhewn the impropriety of this, by obſerving that the epithets of diſtinction taken from the colour of the flower are not ſufficient for the ſeparation of the two genera; there being one that is properly of the former, the flower of which is yellow: by the character of the preſent genus here given, it will appear that they are quite diſtinct: I have therefore retained the name *Rhinanthus*, as it is uſeful for the diſtinction, and appropriated the two Engliſh names diſtinctively, giving that of *coxcomb* only to the preceding genus, and that of rattle only to this.

DIVISION I. BRITISH SPECIES.

1. Common yellow Rattle.

Rhinanthus vulgaris.

The root is ſhort, ſlender, crooked, hard, and furniſhed with many fibres.

The ſtalk is round, firm, upright, of a yellowiſh green, a foot high, and branched toward the top.

The leaves ſtand in pairs: they are oblong, broad, and have no footſtalks: they are broadeſt at the baſe, narrower to the end, ſharply indented at the edges, and terminate in a point: their colour is a duſky green, and their ſubſtance firm.

The flowers are numerous, and have a ſingular appearance: they ſtand in long ſeries up the tops of the ſtalks, and principally on one ſide: they have a great ſtriated cup, like a bladder: the flower itſelf is ſmall, and of a bright yellow.

The ſeed veſſel is large, rounded, and flatted; and the ſeeds are flat and brown.

It is common in paſtures, and flowers in June.

C. Bauhine calls it *Pedicularis pratenſis lutea ſeu criſta galli.* Others, *Criſta galli lutea*, and *Criſta galli fœmina.* We in Engliſh, *Yellow rattle*, or *Coxcomb.*

Thoſe who call this the female, diſtinguiſh what they call another ſpecies under the name of the male, but it is only a variety: the principal difference is the ſtature; the male, as it is called, growing in a more favourable ground, and being taller.

2. Narrow-leaved yellow Rattle.

Rhinanthus foliis anguſtioribus.

The root is long, ſlender, crooked, and furniſhed with a multitude of fibres.

The ſtalk is round, firm, upright, and very much branched, and is uſually of a rediſh colour.

The leaves are numerous: they ſtand in pairs, but at ſmaller diſtances by much than in the common kind: they are very narrow, and ſharply dented at the edges; of a pale green, and not ſo broad at the baſe as in the other.

The flowers ſtand in a long ſeries on the upper branches, and are beautifully variegated, though very ſmall: the top of the flower is yellow, and the upper lip is purple.

The whole plant is two foot high, and very robuſt.

The ſeed-veſſels are long and flat; and the ſeeds are alſo flat, but ſmall.

It is frequent in paſtures in the north of England; and flowers in Auguſt.

C. Bauhine calls it *Criſta galli anguſtifolia montana.* Ray, *Pediculis major anguſtifolia ramoſiſſima flore minore luteo, labello purpureo.*

DIVISION II. FOREIGN SPECIES.

Hairy yellow Rattle.

Rhinanthus foliis villoſis.

This is a ſmall but ſingular and pretty plant.

The root is longiſh, crooked, ſlender, and full of fibres.

The ſtalk is round, ſlender, upright, of a rediſh colour, and eight inches high.

The leaves ſtand in pairs, at diſtance, pair from pair: they have no footſtalks, and they are narrow, oblong, not at all indented at the edges, and a little hairy.

The flowers ſtand at the tops of the ſtalks, and have ſtriated and ſwollen cups.

The ſeed-veſſel is flatted, but of a rounded figure; and the ſeeds are large.

It is a native of Ceylon, and flowers in May.

Burman calls it *Hyſſopus zeylanius tenellus pratenſis*: but it is evidently a plant of this genus.

GENUS XI.

EYEBRIGHT.

EUPHRASIA.

THE flower conſiſts of a ſingle petal, and approaches very much to the labiated ſhape: it is formed into a tube and two lips; the tube is ſhort and plain: the upper lip is hollow and indented; the lower lip is divided into three ſegments, and theſe are equal in ſize, and obtuſe: the cup is compoſed of a ſingle piece, divided into four unequal ſegments; and the ſeed-veſſel is oblong, oval, and compreſſed.

Linnæus places this among his *didynamia angioſpermia*; the flowers having four threads, two longer, and two ſhorter; and the ſeeds being contained in a capſule.

DIVISION I. BRITISH SPECIES.

1. Common Eyebright.

Euphraſia vulgaris.

The root is long, white, ſlender, and furniſhed with numerous fibres.

The ſtalk is round, firm, erect, of a deep green, very much branched, and eight inches high.

The leaves are placed in pairs, and they have no footſtalks: they ſtand very thick, and they are ſhort, broad, deeply ſerrated, and of a very dark green, but of a bright and fleſhy ſurface.

The flowers are large, and white, variegated with a few dots: they ſtand in the boſoms of the leaves, principally toward the tops of the ſtalks, and are very pretty; their bright whiteneſs, and the deep green of the reſt of the plant, making a pretty contraſt to one another.

The ſeed-veſſel is oblong, and the ſeeds are very ſmall.

It is common in our hilly meadows, and flowers in Auguſt.

C. Bauhine calls it *Euphraſia officinarum.* Others, *Euphraſia vulgaris*, or, ſimply, *Euphraſia.*

Eyebright is famous againſt diſorders of the eyes.

In common inflammations of the eyes the cuſtom is to uſe the freſh expreſſed juice by way of a collyrium, waſhing them twice a day with it, and wearing a piece of ſilk over them.

In worſe diſorders the whole herb, dried and powdered, and taken for many months, half a dram twice a day, is recorded to have done great ſervice. There are accounts that ſeem well atteſted of people reſtored to ſight by it. The diſtilled water is recommended by ſome for the ſame purpoſes, but that has little virtue.

2. Purple Eyebright.

Euphraſia flore rubro.

The root is ſhort, crooked, woody, whitiſh, and furniſhed with a few fibres.

The ſtalk is round, firm, upright, of a purpliſh colour, conſiderably branched, and eight or ten inches high.

The leaves ſtand in pairs, and are very frequent upon the ſtalk, except toward the bottom, where for three inches it is generally naked: they are longiſh, narrow, ſharply ſerrated at the edges, and pointed at the ends: they have no footſtalks, and are at firſt of a browniſh green colour, and afterwards browniſh or rediſh, with very little green: the whole plant, when it has ſtood ſome time, frequently becomes purple.

The flowers are ſmall, and of a duſky red: they are very numerous, and ſtand in the boſoms of the leaves all the way up the ſtalk.

The ſeed-veſſel is oblong, and larger at one end than the other: the ſeeds are very ſmall and brown.

It is frequent in dry paſtures, and on barren and heathy ground. It flowers in July.

C. Bauhine calls it *Euphraſia pratenſis rubra.* J. Bauhine, *Euphraſia parvo purpurea*; and the common writers, *Crateogonon euphroſine*; ſuppoſing ſome reſemblance in it to the cow-wheat, to be hereafter deſcribed: It is alſo called in Engliſh, *Eyebright cow-wheat.*

3. Short-leaved Eyebright.

Euphraſia foliis brevibus.

The root is long, ſlender, and furniſhed with numerous fibres.

The ſtalk is round, upright, and hard, but brittle: it is very much branched, and eight or ten inches high, of a purpliſh colour uſually, ſometimes of a pale green, and a little hairy.

The leaves are placed in pairs, and have no footſtalks: they are broad, ſhort, and indented ſharply at the edges: their colour is an aſh or greyiſh green, but they have a gloſſy ſubſtance, like thoſe of the *common eyebright.*

The flowers are ſmall, and of a deep purple: they grow from the boſoms of the leaves all the way up the ſtalks from the middle to the top.

The ſeed-veſſels are oblong, and largeſt at the baſe; and the ſeeds are large and whitiſh.

It is a native of our northern counties, but is not common.

C. Bauhine calls it *Teucrium alpinum coma purpuro cærulea.* Ray, *Euphraſia rubra, foliis brevibus obtuſis.*

4. Great-leaved Eyebright.

Euphraſia major latifolia.

The root is long, ſlender, white, and furniſhed with a few fibres.

The ſtalk is round, upright, firm, and a foot high:

high: its colour is uſually a pale green, ſometimes rediſh; and it is lightly hairy, and very much branched.

The leaves grow irregularly: ſome toward the lower part of the ſtalk generally ſtand in pairs, but the greater part alternately: they have no footſtalks: they are broad, oblong, large, of a duſky green, and rough ſurface; dented at the edges, and pointed at the ends.

The flowers riſe ſingly from the boſoms of the leaves all the way up to the top-part of the ſtalk; and they are large and yellow.

The ſeed-veſſel is oblong, and the ſeeds are very ſmall and rediſh.

It is a native of Cornwal, and of the iſland of Jerſey; and flowers in July.

J. Bauhine calls it *Criſtæ galli affinis planta Romana, ſeu Criſtæ galli major Italica.* Ray, *Euphraſia major lutea latifolia paluſtris.*

DIVISION II. FOREIGN SPECIES.

1. Narrow-leaved yellow Eyebright.

Euphraſia anguſtifolia flava.

The root is ſmall, long, and furniſhed with a few fibres: it is whitiſh, woody, and crooked.

The ſtalk is angulated or ridged, and appears ſquare: it is ſlender, but firm, upright, branched, and a foot and half high.

The leaves are long, and very narrow: they ſtand in pairs without footſtalks, and are of a duſky green, dented at the edges and ſharp-pointed.

The flowers are very numerous: they ſtand in long, cloſe ſeries all up the tops of the branches, and are ſmall, and of a gold yellow.

The ſeed-veſſel is oval, but oblong; and the ſeeds are ſmall and whitiſh.

It is frequent in Italy and Spain; and flowers in Auguſt.

C. Bauhine calls it *Euphraſia pratenſis lutea.* Columa, *Euphraſia lutea montana anguſtifolia altera.*

2. Eyebright, with three-pointed leaves.

Euphraſia foliis tricuſpidatis.

The root is very ſlender, white, longiſh, crooked, and furniſhed with numerous fibres.

The ſtalk is round, firm, rediſh, ſomewhat branched, and of a purpliſh colour.

The leaves ſtand alternately, and have no footſtalks: they are very narrow; and undivided at the edges till they come toward the end, where they are broader than in any other part, and have two notches oppoſite to one another, which give the tip of the leaf a three-pointed appearance.

The flowers ſtand in the boſoms of the leaves all the way up the tops of the ſtalks: they are ſmall, and of a whitiſh red.

The ſeed-veſſels are oblong, and the ſeeds are ſmall.

It is a native of Italy, and flowers in Auguſt.

Linnæus calls it *Euphraſia foliis linearibus tricuſpidatis.*

3. Low purple Eyebright:

Euphraſia pumila flore rubro.

This is a very ſmall, but ſingular and pretty ſpecies.

The root is ſmall, oblong, divided, and hung about with many fibres.

The ſtalk is angulated, ſhort, rediſh, and ſomewhat hairy: it is ſeldom at all branched, and is about four inches high.

The leaves ſtand in pairs, and have no footſtalks: they are ſhort, broad, and very deeply indented, in ſuch a manner that they reſemble the fingered leaves of thoſe plants which have them divided down to the baſe into narrow and long ſegments.

The flowers are large for the bigneſs of the plant, and purple.

The ſeed-veſſels are large, and the ſeeds whitiſh.

It is a native of Italy, and flowers in May.

C. Bauhine calls it *Euphraſia pratenſis latifolia Italica.* Columna, *Euphraſia latifoliâ pratenſis.*

Theſe ſeveral ſpecies agree in virtues with the common Engliſh kind, and are in the ſame degree of eſtimation there that ours is here.

This plant bruiſed and laid upon the eyes in caſes of inflammations is a ſpeedy remedy. They throw a large quantity of it into their wine as it is making, and keep it for old mens drinking, to preſerve their ſight. They alſo eat the young ſhoots and tops of the ſeveral ſpecies among their ſallading for the ſame purpoſe.

GENUS XII.

COW-WHEAT.

MELAMPYRUM.

THE flower conſiſts of a ſingle petal, and approaches to the labiated ſhape: it is formed into a tube and two lips: the tube is long and crooked: the upper lip is galeated, flatted, and niped at the top, and turns back at the edges: the lower lip is divided into three equal blunt ſegments, and has two eminences in the middle.

The cup is tubular, and lightly divided into four ſegments: the ſeed-veſſel is oblong, flatted, and pointed at the top.

Linnæus places this among the *didynamia angioſpermia*; the threads in each flower being four; two longer, and two ſhorter: and the ſeeds contained in a capſule.

DIVISION I. BRITISH SPECIES.

1. Common Cow-wheat.

Melampyrum vulgare.

The root is ſmall, oblong, crooked, and white, and has a few fibres.

The ſtalk is ſlender, weak, angulated, but moderately upright, very much branched, and about a foot high.

The leaves ſtand in pairs, and have no foot-ſtalks.

Thoſe toward the bottom of the ſtalk are oblong, ſomewhat broad, and deeply indented toward the baſe; thoſe on the upper part of the plant are longer and narrower, and altogether plain.

The flowers are large and yellow: they grow in looſe ſpikes at the tops of the ſtalks, bending one way.

The ſeed-veſſel is oblong and hooked at the top: the ſeeds are large.

The whole plant is of a blackiſh colour.

It is common in woods, and flowers in June and July.

C. Bauhine calls it *Melampyrum luteum latifolium*. Others, *Cratæagonum vulgare*.

2. Narrow-leaved Cow-wheat.

Melampyrum anguſtifolium

The root is long, ſlender, white, crooked, and full of fibres.

The ſtalk is firm, ſlender, and of a purpliſh colour: it is erect, and not much branched.

The leaves ſtand in pairs, and they have no footſtalks: they are placed at diſtances upon the ſtalk, and are very long and narrow; of a deep green, and not at all indented, but ſharp at the point.

The flowers are large, and uſually of a yellow colour; but in this there is a great deal of variation; we ſee them ſometimes white, ſometimes red, and ſometimes of a mixed colour between all theſe.

They ſtand at the tops of the ſtalks in a kind of creſted heads, or ſhort, thick, ſquare ſpikes.

The ſeed-veſſel is oblong, and the ſeeds are very large.

It is common in the northern counties of England; and flowers in July.

C. Bauhine calls it *Melampyrum luteum anguſtifolium*. We in Engliſh, *Creſted cow-wheat*.

There is a very pretty variety of this plant, in which the flower is white, ſpotted with yellow. This has been deſcribed by ſome as a diſtinct ſpecies, but erroneouſly. It is common with us among the other.

3. Purple-headed Cow-wheat.

Melampyrum purpuraſcente coma.

The root is ſlender, woody, and furniſhed with a few fibres.

The ſtalk is ſlender, ſquare, tolerably upright, of a purpliſh colour, ſomewhat branched, and about a foot high.

The leaves ſtand in pairs: they are oblong, and moderately broad, of a deep green, and dented ſharply and deeply at the edges.

Thoſe which grow at the tops of the ſtalks differ from the reſt: they are ſhort, broad, and of a deep red, which gives the tops of the plant a purple tinge, whence its name.

The flowers grow among theſe, and are large and beautiful: they are variegated with red and yellow.

The ſeed veſſel is large and oval: the ſeeds are few, large, and whitiſh.

It is found in the cornfields in Norfolk and ſome other counties; but it is not a common plant. It flowers in Auguſt.

C. Bauhine calls it *Melampyrum purpuraſcente coma*. J. Bauhine, *Triticum vaccineum*.

Cow-wheat is a uſeful plant for the fattening of cattle: in places where it is more common they uſe it for that purpoſe; and with us it would be very well worth the huſbandman's while to try it among the great number of thoſe plants brought from abroad, which are now ſo ſucceſsfully cultivated in our fields; as ſaintfoine, chiches, lentils, and the like. This, being a native of England, would grow more freely than any of them, and it would not require a rich ſoil; ſo that the trial might be made with little expence or trouble.

It is common among the corn in Flanders, as well as in ſome counties of England; and they thraſh it with the grain, and let it come into their bread; it increaſes the quantity, and does no harm.

Some have ſaid that the bread in which it is mixed cauſes giddineſs of the head and other complaints; but this is contradicted by thoſe who have experience. It fattens cattle ſafely and ſpeedily.

DIVISION II. FOREIGN SPECIES.

Woolly-topped Cow-wheat.

Melampyrum calycibus lanatis.

The root is long, ſlender, and white.

The ſtalk is ſquare, erect, firm, and very little branched: it is a foot high, and uſually is of a greeniſh colour.

The leaves ſtand two at a joint: they are long, narrow, and of a deep green.

Thoſe which grow on the lower part of the ſtalk are not at all jagged; but thoſe on the upper part have ſome indentings near the baſe.

The ſtalks are terminated by cluſters of ſmall, ſhort leaves, placed very thick together, with a downy matter among them; and theſe are uſually of a deep violet blue.

The flowers are large, and of a beautiful gold yellow.

The ſeed-veſſel is oblong, and the ſeeds are few and large.

It is a native of Germany, and grows in woods and foreſts.

C. Bauhine calls it *Melampyrum coma cærulea*.

GENUS

GENUS XIII.

HOODED MILLFOIL.

LENTIBULARIA.

THE flower conſiſts of a ſingle petal, approaching to the labiated ſhape: it is formed into two lips, a palate, and a ſpur: the upper lip is undivided and obtuſe; the lower lip is larger, and is alſo undivided; the palate which riſes between them is heart-faſhioned: the ſpur is ſmall, and runs out behind the flower. The cup is compoſed of ten little hollow leaves, and falls with the flower: the ſeed-veſſel is round and large.

Linnæus ſeparates this genus from the generality of the others, placing it, with a few more in his ſecond claſs, among the *diandria monogynia*; the threads being two in each flower, and the rudiment of the capſule ſingle.

He alſo takes away its uſual and received name *lentibularia*, and calls it *utricularia*.

I have reſtored the former and familiar name, and joined the genus to thoſe with which it is united by nature; the number of the threads in the centre being a trivial conſideration, when ſeen, in competition with the eſſential characters, by which it is placed among the plants that have a flower conſiſting of a ſingle petal, and followed by a ſingle capſule; this being the general diſtinction of the preſent claſs.

DIVISION I. BRITISH SPECIES.

1. Common Hooded Millfoil.

Lentibularia vulgaris.

The root is compoſed of a vaſt tuft of fibres.

From this grow numerous long and ſlender ſhoots, which ſpread upon the mud at the bottom of thoſe waters in which the plant grows.

On theſe ſtand the leaves: they are of a dark green, beautifully divided, and as they are kept ſeparate by the water make a beautiful appearance; but when taken out they fall together and looſe their ſhape.

Among theſe grow round bodies, of the bigneſs of the leaves of duckweed: they are not a regular part of the leaves, nor do they grow from any diſtinct place on them, but irregularly among them, and in a great number; ſome terminate the ſhoots, and others are diſpoſed looſely among the leaves.

The ſtalks riſe from theſe ſhoots, and are ſlender, weak, and naked.

From the middle upwards grow the flowers: theſe ſtand ſingly on long footſtalks, and are large and yellow: the ſpur is of a conic figure.

The ſeed veſſel is large and round: the ſeeds are numerous and ſmall.

It is common in ditches, and other ſtagnating waters in the fens in Lincolnſhire, and elſewhere; and flowers in July.

C. Bauhine calls it *Millifolium aquaticum lenticulatum.* The common writers, *Millifolium galericulatum*, and *Hooded water millfoil.*

2. Little Hooded Millfoil.

Lentibularia minima.

This is an extreamly minute but very pretty plant.

The roots are a few, white, long, and extreamly ſmall fibres.

The firſt ſhoots from theſe are numerous, long, ſlender, and naked for the moſt part; but ſometimes there grow on them a few ſmall and finely divided leaves: whether there be leaves or not, there are conſtantly many little round bodies, perfectly reſembling thoſe of the common kind.

The ſtalks are minute, extreamly ſlender, and naked.

They are uſually of a yellowiſh colour, ſometimes rediſh; and on theſe ſtand the flowers.

They are large, and of a pale yellow: they have each a ſeparate, ſhort footſtalk; and they grow at diſtances, one above another, from the middle of the ſtalk to the top.

The ſeed-veſſel is round and ſmall; and the ſeeds are very minute.

It is common in Northamptonſhire, and in many places where it is not much regarded, floating upon the water.

It flowers in June.

Plukenet calls it *Millifolium paluſtre galericulatum minus flore minore.* Ray, *Lentibularia minor.* Boccone, *Aparine aquis innatans capreolis donata.*

DIVISION II. FOREIGN SPECIES.

1. Large-leaved Lentibularia.

Lentibularia foliis majoribus.

The root is compoſed of numerous long, black fibres.

The firſt ſhoots ſpread upon the ſurface, and are large, and very finely divided; ſo that they reſemble thoſe of ſome of the water crowfoots.

Among theſe grow ſeveral ſhoots, that ſpread likewiſe in the ſame manner, and have leaves on them like the firſt from the root, but ſmaller.

The ſtalks riſe, ſome from theſe, and others from the root: they are ſlender and yellowiſh: they are not naked, as thoſe of the preceding ſpecies, but have leaves of the ſame kind with

thoſe from the root: theſe are beautifully divided, and of a blackiſh green.

The flowers grow toward the tops of the ſtalks, and are large and yellow.

The ſeed-veſſel is very large and round; and the ſeeds are ſmall.

It is a native of North America, and flowers in Auguſt.

Plumier calls it *Linaria paluſtris fœniculi folio.*

GENUS XIV.

WATER GLADIOLE.

DORTMANNA.

THE flower conſiſts of a ſingle petal, and approaches in ſome degree to the galeated kind, but not nearly ſo much as the others in general of this claſs: it is formed into a ſhort tube ſplit in the upper part, and two irregular lips: the upper lip conſiſts of two ſegments, which are narrower and ſmaller; and the lower one of three, which are broader and larger; but when the flower is perfectly open this form is leſs obſervable: the ſeed-veſſel is round and large; and the cup is divided into five ſlight ſegments. The leaves of the plant are hollow and divided within.

Linnæus places this among his *ſyngenaſia polygamia monogamia*; but he does not allow it to be a diſtinct genus: he places it among the *rapunculi*, which he arranges there under the name of *lobelia*.

The ſhape of the ſeed-veſſel diſtinguiſhes it from his *lobelia*, and the ſtructure of its leaves from all other plants. None is more properly of a genus ſeparate from all others.

There is but one known ſpecies of this plant, and that is a native of Britain and other parts of the north of Europe.

Water Gladiole.

Dortmanna.

The root is a cluſter of long, thick fibres, which penetrate deep into the mud at the bottom of thoſe waters where it delights to grow.

The leaves riſe in a tuft twelve or fourteen together: they are long, narrow, and of a pale green, hollow within, and divided, in the manner of a pod of ſome of the wallflower kinds, into two ſeparate empty ſpaces, by a membrane that runs lengthwiſe from the baſe to the point.

The ſtalk riſes in the midſt, and is yellowiſh and round: it riſes to a great height when the water is deep; but with us, as it generally grows in ſhallow places, its length is about a foot: ſometimes it is naked, ſometimes there grow on it a leaf or two like thoſe from the root.

The flowers ſtand at the top, in a kind of looſe ſpike; but they hang on their footſtalks, and generally fall all on one ſide: five or ſix is the uſual number: but they rarely open together: they are of a pale purple.

The ſeed-veſſel is large and round; and the ſeeds are numerous and ſmall.

It is common in waters on the hills in the north of England; and flowers in July.

Ray led Linnæus into the calling this a ſpecies of *rapuntium*; for he ſays its flower makes it ſuch, though the ſeed-veſſel ſhews a difference: but if the ſeed-veſſel had been as like that of *rapuntium* as the flower, ſtill the whole plant is ſo perfectly unlike, and its leaves are ſo extreamly ſingular, that there is reaſon enough to keep it as a diſtinct genus.

Cluſius calls it *Gladiolus lacuſtris Dortmanni*, from the name of Dortman a German apothecary, from whom he firſt received it: but, as *gladiolus* is the name of a diſtinct genus, it is better to call it, as Rudbeck does, *dortmanna*. C. Bauhine calls it *Leucoium paluſtre flore ſubcæruleo*. Others, *Gladiolus paluſtris.*

There is nothing known of the virtues of this or of the preceding plant: they are food for ducks and other water-fowl.

GENUS XV.

BROOMRAPE.

OROBANCHE.

THE flower is made of a ſingle petal, and approaches to the labiated form: it conſiſts of a tube and two lips: the tube is crooked, thick, and ſhort: the upper lip is broad, hollow, and indented; and the lower lip is divided into three unequal ſegments, and turns back: the cup is divided lightly into four ſegments; and the ſeed-veſſel is of an oval figure, but ſomewhat oblong, and pointed at the end.

Linnæus places this among the *didynamia angioſpermia*; there being four threads in the flower, of which two are longer and two ſhorter, and the ſeeds being contained in a capſule.

DIVISION I. BRITISH SPECIES.

1. Common Broomrape.

Orobanche vulgaris.

This is a ſingular and ſtrange plant; having neither the colour of the generality of plants, nor any thing that can properly be called leaves.

The root is thick, roundiſh, and compoſed of a multitude of ſcales, of a tough ſubſtance and yellowiſh colour, laid irregularly over one another.

The ſtalk is ſingle, thick, upright, undivided, and a foot and half high: its colour is yellowiſh, and its ſubſtance light and tender.

At diſtances, from the bottom to the top, there ſtand certain little membranes of a yellowiſh brown alſo: theſe are ſhort, and of an irregular figure, and are all it has by way of leaves.

The flowers ſtand at the top of the ſtalk, and, for a great way down it, at diſtances one from another; and each has one of theſe little membranes under it.

They are large, and gape very wide open: their colour is in part yellowiſh, and in part a dead faded purple; and their threads are white, and have black buttons, which are as conſpicuous as any thing in the flower.

The ſeed-veſſel is oblong, and large at the bottom: the ſeeds are very minute.

It is common in barren paſtures, and ſometimes is found in cornfields.

It grows no where ſo plentifully as among fields of broom on barren heathy hills; in theſe places it uſually grows to the root of the broom, and thence obtained its Engliſh name of *broomrape*; but they err who ſuppoſe it will not grow elſewhere. It flowers in July.

C. Bauhine calls it *Orobanche major garyophyllum oleus*. J. Bauhine, *Orobanche flore majore*. Others, *Orobanche vulgaris*.

This ſpecies ſometimes has a lightly aromatick ſmell, but frequently nothing of this is to be obſerved: it depends in a great meaſure on the place of growth and particular condition of the plant.

It is good againſt obſtructions, and is beſt given in a ſtrong infuſion.

The herb muſt be freſh gathered for this purpoſe, and the whole cut into thin ſlices, and having water poured on it: this, with a little white wine and ſyrup of marſhmallows, operates powerfully by urine, and is good in jaundices and obſtructions of the ſpleen.

A conſerve of it is alſo recommended by ſome againſt hypocondriac complaints: and an ointment made of it with lard againſt ſchirrous tumours.

2. Branched Broomrape.

Orobanche ramoſa.

The root is thick, large, and tuberous; it is compoſed of numerous irregular ſcales, in the manner of the other; and there are ſeveral fibres grow to it.

The ſtalk is firm, erect, and very much branched: it is of a rediſh colour, much ſlenderer than that of *common broomrape*, and of a firmer ſubſtance, and grows ſix or eight inches high.

The branches riſe from it on all ſides from the bottom nearly to the top.

There are no leaves but a few membranes, which are of a pale yellowiſh, and ſometimes of a purpliſh colour; and grow irregularly on the ſtalk and branches.

The flowers ſtand in ſpikes at the tops of the ſtalks, thickly compacted together; and they are of a pale red, large, and conſpicuous.

The ſeed-veſſel is oval, and the ſeeds are very minute.

This is found in cornfields in the ſouthern counties of England, but is not common.

C. Bauhine calls it *Orobanche ramoſa*. J. Bauhine, *Orobanche minor purpureis floribus ſive ramoſa*.

The *common broomrape* is ſometimes found with a flower ſmaller than ordinary, and in this condition has been deſcribed by ſome as a diſtinct ſpecies; but it is no more than a variety owing to accident in the growth.

DIVISION II. FOREIGN SPECIES.

1. Great-flowered Broomrape.

Orobanche flore maximo.

This is a much larger plant than either of our kinds, and the flowers are alſo remarkably larger, even in proportion to the bigneſs of the whole.

The root is an irregular knob, with ſome few ſtraggling fibres: this knob is compoſed of ſcales, in the manner of ours, but it is not ſo large.

The ſtalk is firm, upright, a yard high, and not at all branched; and the whole plant is of a rediſh colour.

What ſtand for leaves are only a kind of ſmall membranes ſticking cloſe to the ſtalk: there are more of them toward the bottom, fewer toward the top, and they are all of the ſame colour with the ſtalk, except that they are at firſt a little deeper.

The flowers ſtand at the top, in a thick, ſhort ſpike, or a large tuft; and they are long, and of a deep purple; and are obviouſly diſtinguiſhed by the buttons of the threads, which ſtand out from the mouth of the flower.

The ſeed-veſſel is large and oblong; and the ſeeds are very minute.

It is frequent in woods in the ſouth of France; and flowers in April.

C. Bauhine calls it *Orobanche flore majore*. J. Bauhine, *Orobanche magna purpurea monſpeſſulana*.

2. Single-flowered Broomrape.

Orobanche flore ſolitario.

The root is a ſmall knot of a ſcaly ſtructure, from which there run lengthwiſe a few fibres.

From

From this riſe ſeveral ſtalks together: they are round, weak, ſlender, and naked, except at the baſe near the ground, where they have ſome little membranes in the place of leaves.

The whole plant is not more than four inches high; and at the top of the ſtalk ſtands a ſingle flower.

This is large and yellow, though the colour varies greatly, for it is ſometimes purpliſh or blue.

It is a native of North America, and flowers in April.

Ray calls it *Orobanche ant helleborine affinis marilandica caule nudo unico in ſummitate flore.*

It is a very ſingular and very beautiful ſpecies.

GENUS XVI.

TOOTHWORT.

ANBLATUM.

THE flower conſiſts of a ſingle petal, and approaches to the labiated ſhape: the whole is formed into a tube, and two lips: the tube is ſhort: the upper lip is long and undivided; the lower lip is ſhorter, but is alſo ſtrait and undivided: theſe ſtand gaping open, and are both compreſſed: the ſeed-veſſel is roundiſh, and pointed: the cup is ſwoln, flatted, and divided into four ſlight ſegments at the edge.

Linnæus places this among his *didynamia angioſpermia*; the threads in each flower being four, of which two are longer, two ſhorter, and the ſeeds contained in a capſule. This author has taken away its familiar and uſual name *anblatum*, and calls it *ſquamnaria*.

This is his conduct in his *Genera*; but in that later work his *Species Plantarum*, he has joined it with ſome others, under the common name *lathræa*.

Theſe genera approach very near to one another; but the difference is ſufficient on which to eſtabliſh their abſolute diſtinction. There is but one known ſpecies of *anblatum*, and that is common to Britain and all the north of Europe.

Toothwort.

Anblatum.

The root is extreamly ſingular in form and ſubſtance: it is thick, white, fleſhy, and of a ſcaly ſtructure, ſpreading a great way, and that in a very irregular manner, juſt under the ſurface, one piece growing ſideways from another, and a third from that, and ſo on in every direction.

The ſtalks are numerous: they riſe from various parts of the root, but only one from each head: they are thick, fleſhy, tender, white, or browniſh, and ſix or ſeven inches high: the ſkin is tender, and the internal part full of a watery juice.

There are properly no leaves, but a kind of membranes, ſtanding irregularly on the ſtalk, in the manner of thoſe of broomrape.

The flowers ſtand in a ſhort ſeries at the top of the ſtalk.

They are large, and of a faint purple; or whitiſh, with a purple tinge.

The ſeed-veſſel is very large, and the ſeeds are numerous and minute.

It is found under hedges and about the roots of trees where the ſoil is looſe and crumbly, and where there is a covering of dead leaves. It is not very common, and it is often overlooked.

It flowers in April.

C. Bauhine calls it *Orobanche radice dentata major*. Others, *Dentaria major*, *dentaria mathioli*, and *anblatum*. Some, *Apyllon*.

It is cooling and aſtringent. The root, dried and powdered, is to be taken, a dram for a doſe, and will have great effect. It is recommended againſt ruptures, and internal bruiſes.

SERIES II.

Plants of which there is no ſpecies native of BRITAIN.

GENUS I.

CLANDESTINA.

THE flower conſiſts of a ſingle petal, and approaches to the labiated kind: it is formed into a tube and two lips: the tube is oblong, and the lips ſtand gaping open, and are of an inflated or ſwoln figure: the upper lip is hollow, and has a crooked point: the lower lip is divided into three ſmall, blunt ſegments, and turns back: the cup is hollow, and divided deeply into four ſegments; and the ſeed-veſſel is large, rounded, and terminated by a point.

Yellow Coxcomb

Common Coxcomb

Common Yellow Rattle

Common Eyebright

purple Eyebright

Great broad leaved Eyebright

Eyebright with three Pointed leaves

Narrow leaved Yellow Eyebright

Low Purple Eyebright

Common Corn Wheat

Narrow leaved Corn Wheat

Purple leaved Corn Wheat

Woolly Cupid Corn Wheat

little Hooded Millfoil

Common hooded Millfoil

water Chickweed

Common Broomrape

Branched Broomrape

Great Flowered Broomrape

Toothwort

Linnæus places this among the *didynamia angioſpermia*; the ſeeds being contained in a capſule, and the flower having four threads, two longer, and two ſhorter.

This author takes away its former name, and calls it *lathræa*. It has the name *clandeſtina* from this circumſtance, that almoſt the whole plant is buried, and grows under ground, nothing appearing above the ſurface but a ſmall part of the ſtalk and the ſpike of flowers.

Purple Clandeſtina.

Clandeſtina purpurea.

The root, properly and diſtinctly ſo called, is only a tuft of black, ſhort fibres; but if we comprehend under that name all the part of the plant under ground, it is to be called thick and branched: this part, however, is properly the ſtalk, not the root of the plant, and is to be conſidered as ſuch, from its manner of growing and office, though it take the place of the root; theſe black fibres alone being conſidered as part of the root.

The ſtalk is five inches high, thick, and divided into many branches: it is of a whitiſh colour, and full of juice, and is covered with a kind of rudiments of leaves: theſe are ſhort, broad, and thin; and they lie in a ſcaly form upon the ſtalks.

Many of theſe ſhoot from the main ſtem, and grow two or three inches high all the way within the earth, where they periſh without ever coming to the air: the main, or principal ſtalk only pierces the ſurface of the ground, and ſhews itſelf. This is full of the buds of flowers, and riſes, in a crooked form, an inch and half long; and in ſome degree, from its ſhape and colour, reſembles the comb of a cock.

The flowers ſoon after open, and are large, and of a deep purple, as is alſo the ſtalk and all that appears above ground, and ſometimes what is below, though that is more uſually white.

The ſeed veſſel is roundiſh and large: the ſeeds are minute.

It is found in foreſts in many parts of Germany.

Mentzelius calls it *Orobanche radice dentata altius radicante foliis et floribus purpureis.*

GENUS II.

BIRTHWORT.

ARISTOLOCHIA.

THE flower conſiſts of a ſingle petal, and is of an irregular figure: it is formed into a tube, which has a roundiſh, folded baſe, the foldings being ſix; and a wide mouth, which in the lower part runs out into a very long and undivided tongue: the tube is ſlightly hexangular: it has no cup; the ſeed-veſſel is large and roundiſh, and in ſome degree hexangular.

Linnæus places this among his *gynandria hexandria*; the buttons being ſix, and growing without threads to the piſtil.

It very plainly belongs to the reſt of this claſs; the flower being compoſed of one petal of an irregular form, and followed by a ſingle ſeed-veſſel; and it is one of the misfortunes of Linnæus's method that he ſeparates it from thoſe to which it is allied, placing it in a diſtinct arrangement, becauſe of this little ſingularity of the buttons.

1. Round Birthwort.

Ariſtolochia rotunda.

The root is very large, tuberous, and of a roundiſh figure, with many fibres growing irregularly from various parts of its ſurface: it is rough on the ſurface, brown on the outſide, and yellow within; and is of a bitter and very diſagreeable taſte.

The ſtalks are numerous, weak, and ſquare: they are of a pale green colour, and are two feet long, but not able to ſupport themſelves upright.

The leaves are placed ſingly, and at conſiderable diſtances, and have no footſtalks: they are large, and of a deep green: they are of a heart-faſhioned ſhape, encompaſſing the ſtalk at the baſe, and thence growing ſmaller to the end, where they terminate in an obtuſe point.

The flowers ſtand ſingly on long footſtalks riſing from the boſoms of the leaves: they are long and crooked, and are of a greeniſh colour on the outſide, and of a blackiſh purple within.

The ſeed-veſſel is very large, and of an oval figure: it contains many ſeeds, with a fungous matter between them.

It is common in the hedges of Spain and Italy, and in the ſouth of France.

C. Bauhine calls it *Ariſtolochia rotunda flore ex purpura nigro.* Others, only *Ariſtolochia rotunda.*

There is a variety of this plant, with the flower of a whitiſh purple, inſtead of a blackiſh purple: this has been treated of as a diſtinct ſpecies, but it is nothing more than a variation from accident.

2. Long Birthwort.

Ariſtolochia longa.

This is diſtinguiſhed at ſight from the other, though it greatly reſemble it in the general form, by its having footſtalks to the leaves, the other having none.

The root is large, thick, and of an irregular oblong figure.

The ſtalks are numerous, weak, and ſquare: they are of a pale green, a foot and half long, but not erect: they trail, and hang among any thing that will ſupport them.

The leaves are rough, of a pale green, and of a heart-faſhioned ſhape, but with an obtuſe point: they ſtand alternately, and have moderately long, ſlender, pale green footſtalks.

The flowers riſe ſingle from the boſoms of the leaves, and are long, hollow, and crooked: each has its ſeparate ſhort footſtalk; and is of a greeniſh colour, and ſtriated on the outſide, and purple and rough within.

The ſeed-veſſel is large and oval, and contains numerous ſeeds, with a pithy or ſpungy white matter between them.

It is a native of Spain and Italy; and flowers in July.

C. Bauhine calls it *Ariſtolochia longa vera*. Others, *Ariſtolochia longa hiſpanica*; and, ſimply, *Ariſtolochia longa*.

3. Clinching Birthwort.

Ariſtolochia clematitis.

The root is long, ſlender, and creeping: it runs under the ſurface, and ſends up a great number of ſtalks from different parts, and a multitude of black fibres downward.

The ſtalks are of a pale green, jointed, and crooked, but more firm than the others, and three feet high.

The leaves are large, and of a heart-faſhioned ſhape: they ſtand alternately, and have long footſtalks.

The flowers riſe from the boſoms of the leaves, but not ſingly, as in the two preceding kinds, but in conſiderable tufts together: they are long and hollow, and of a pale greeniſh white colour.

The ſeed-veſſel is very large: when fully grown it is as big as a wallnut; and it contains many ſeeds, with a white ſpungy matter between them.

It is a native of the ſouth of France; and flowers in June.

I have ſeen it in woods in Eſſex, but imagine it came from roots or pieces of the ſtalks out of lord Petre's garden.

C. Bauhine calls it *Ariſtolochia clematitis recta*. Others, *Ariſtolochia ſaracenica*; and, ſimply, *Ariſtolochia clematitis*.

4. Small Birthwort.

Ariſtolochia minor piſtolochia dicta.

The root is compoſed of a great many tuberous, long, and not very thick pieces, with many fibres growing to them, and among them.

The ſtalks are numerous, very weak, and trailing: they are a foot long, crooked from joint to joint, and of a pale green.

The leaves ſtand on ſhort footſtalks, and they are ſmall, and heart-faſhioned, very lightly and irregularly notched at the edges, and ſometimes not at all ſo, and blunt at the end.

The flowers are large, hollow, and crooked as the others; they riſe ſingly from the boſoms of the leaves.

The ſeed-veſſel is large, and has a white pith in it, together with the ſeeds.

It is a native of France, and flowers in Auguſt.

C. Bauhine calls it *Ariſtolocharia piſtolochia dicta*. Others, *Ariſtolochia parva*; and *Ariſtolochia polyrrhizos*.

Theſe four poſſeſs the ſame virtues, and are warm, drying, and aperient. The round is the beſt; the long has the next degree of virtue; theſe others much leſs.

It is uſed in the famous powder now in ſo great eſteem for the gout, and is one of the chief ingredients: ſome have omitted it in making that powder for female patients, and the effect has been greatly impaired. The reaſon of omitting it on theſe occaſions has been its power as a promoter of the menſes, not at that time required.

Birthwort is a ſtrong, but diſagreeable bitter; this makes it leſs uſed than it deſerves. It is excellent in diſorders of the head, and in obſtructions of the viſcera.

It is given with ſucceſs againſt the ſtuffings of the lungs, and obſtructions of the menſes; and is excellent to promote the neceſſary diſcharges in lying-in.

5. Snakeroot Birthwort.

Ariſtolochia ſerpentaria virginiana dicta.

The root conſiſts of a vaſt quantity of long, ſlender, and interwoven filaments with a ſmall head: theſe are of a pale greeniſh brown colour, and are of a fragrant ſmell.

The ſtalk is ſlender, jointed, weak, and unable to ſupport itſelf erect: it is a foot or more in length, and of a pale green, rarely at all branched.

The leaves are oblong, and of a ſmooth ſurface: they are of a pale green colour, and ſtand on ſlender footſtalks: they approach to the heart-faſhioned ſhape, but leſs than in the other kinds.

The flowers have long footſtalks: they riſe from the boſoms of the leaves, or naked joints of the ſtalk: they are long and hollow, like the others.

The ſeed-veſſel is large, and contains many ſeeds, with a white pith ſurrounding them.

It is a native of Virginia, and of other parts of North America; and flowers in July.

This is the plant whoſe root is called at the druggiſts *Serpentaria Virginiana*. Plukenet calls it *Ariſtolochia piſtolochia, ſeu Serpentaria Virginiana caude nodoſo*. Others, *Piſtolochia Virginiana*.

Thoſe who gather the roots for exportation are not ſo careful as they ſhould be in taking only the right kind; for there are ſeveral other ſpecies of ſmall *birthworts* common wild in the ſame places; they fancy they have all the ſame virtues, and therefore gather all together: but experience ſhews this, though countenanced by ſome great names, to be an error; for not one of the others has the fragrancy or true taſte of this: they ſhould therefore be ſeparated carefully.

The root of this kind is celebrated among the Indians as a remedy againſt the bites of venomous ſerpents, whence it had the name *ſnakeroot*; and with us it is found to be an excellent cordial and ſudoriſick.

It is good in fevers, in all diſorders of the head and nerves, and in obſtructions of the viſcera.

It may be taken in powder or infuſion, but the beſt way is in tincture made in brandy.

6. Spear-

6. Spear-pointed Birthwort.

Ariſtolochia foliis lanceolatis.

The root conſiſts of a vaſt number of long, ſlender filaments.

The ſtalk is upright, firm, and hard; of a pale green colour, and almoſt woody ſubſtance.

The leaves ſtand alternately, and have ſhort footſtalks: they are long, narrow, and heart-faſhioned at the baſe, but they run out from thence into a ſlender, ſharp point.

The flowers are long, hollow, and of a duſky colour: they have ſhort footſtalks, and they ſtand ſingly in the boſoms of the leaves.

The fruit is large and roundiſh; and the ſeeds have a pithy ſubſtance about them.

It is a native of Virginia, and flowers in Auguſt.

Plukenet calls it *Aroſtolochia polyrrhizos auriculatis foliis Virginiana.*

It is one of the kinds the roots of which are uſed among thoſe of the right Virginian ſnakeroot; but it is very much inferior to the true kind in virtue.

GENUS III.

GERARDIA.

THE flower is made of a ſingle petal, and is of the labiated form: it conſiſts of a tube and two lips: the tube is oblong and rounded: the upper lip is broad, obtuſe, and emarginated: the lower lip is divided into three ſegments, and turned back: the cup is divided at the edge into five ſegments; and the ſeed-veſſel is of an oval form, and opens at the baſe.

Linnæus places this among the *didynamia angioſpermia:* the threads in the flower being four, two longer and two ſhorter, and the ſeeds encloſed in a capſule.

Others have referred the ſeveral ſpecies of this genus to the foxgloves, but they are abſolutely diſtinct.

Another plant of the umbelliferous kind, and altogether different from this, has been called *herba gerardi:* let the ſtudent take care the ſound of the name do not confound in his mind plants ſo diſtinct.

1. Narrow-leaved Gerardia.

Gerardia foliis anguſtis.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalk is round, firm, erect, rarely at all branched, and a foot high.

The leaves ſtand in pairs, and have no footſtalk: they are long, very narrow, and of a pale green; pointed at the ends, and undivided at the edges.

The flowers riſe from the boſoms of the leaves, and are very large and beautiful: they ſtand ſingly, and have ſhort footſtalks: they are hollow, deep, wide open at the mouth, and of a beautiful red colour.

The ſeed-veſſel is large and oval; and the ſeeds are ſmall, numerous, and brown.

It is a native of Virginia, and flowers in June.

Plukenet calls it *Digitalis Virginiana rubra foliis et facie antirrhini vulgaris.*

2. Jagged-leaved Gerardia.

Gerardia foliis laciniatis.

The root is compoſed of numerous thick fibres.

The ſtalk is round, firm, browniſh, erect, and a foot and a half high.

The leaves are placed in pairs, and have no footſtalks: they are long, narrow, and very deeply divided all along the edges, inſomuch that ſome toward the bottom of the plant are of a pinnated form.

The flowers are numerous, large, and beautiful: they are hollow, deep, and of a gold yellow colour: they riſe from the boſoms of the leaves ſingly on long footſtalks, and one or two of them generally terminate the ſtalk.

The ſeed veſſel is oval and large: the ſeeds are numerous and ſmall.

It is a native of Virginia, and flowers in July.

Gronovius calls it *Anonymos floribus flavis ſpecioſis digitalis æqualibus.*

GENUS IV.

CHELONE.

THE flower conſiſts of a ſingle petal approaching to the labiated form: it is diſpoſed into a tube and two lips: the tube is ſhort, and the opening of the mouth is inflated and oblong: the upper lip is obtuſe and dentated at the top: the lower lip is very lightly divided into three ſegments, and there is no opening: the cup is ſmall, and divided at the end into five ſegments: the ſeed-veſſel is oval and oblong.

Linnæus places this among the *didynamia angioſpermia*; the threads being in each flower four, two longer and two ſhorter, and the ſeeds contained in a capſule. There is in all the ſpecies a rudiment of a fifth thread.

Smooth

Smooth Chelone.

Chelone foliis glabris.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalks are numerous, round, firm, upright, and conſiderably branched.

The leaves are long, narrow, and beautifully ſerrated at the edges: they ſtand very irregularly on the ſtalks; thoſe toward the bottom alternately; and thoſe toward the top in pairs.

The flowers are large and white: they ſtand in ſmall cluſters at the top of the ſtalk and branches, and are of a ſingular aſpect, ſhort, thick, hollow, and cloſe at the mouth.

The ſeed-veſſel is oval, and the ſeeds are large and three-cornered.

It is a native of North America, and flowers in July.

Tournefort calls it *Chelone acadienſis flore albo*. Ray, *Digitalis*] *mariana perſicæ folio*; the larger leaves reſembling thoſe of the peach tree.

GENUS V.

TRUMPET FLOWER.

BIGNONIA.

THE flower is made of a ſingle petal, and is of the labiated form: it conſiſts of a tube, a hollow body, and a divided rim: the tube, properly ſo called, is very ſhort, and reaches no farther than the cup: the body is very long and hollow; and the rim is divided into five parts, two of which are turned back; theſe ſtand upwards, and the other three hang downward, and ſpread out: the cup is hollow, and divided into five ſegments at the rim; and the ſeed-veſſel is formed in the manner of a pod.

Linnæus places this among the *didynamia angioſpermia*; the threads in each flower being four, two longer and two ſhorter, and the ſeeds being contained in a capſule.

1. Ever-green Trumpetflower.

Bignonia ſempervirens.

The root is long, thick, tough, and ſpreading.

The ſtalks are numerous, very long, weak, and climbing, but of a woody ſubſtance.

The leaves ſtand in pairs, and have very ſhort footſtalks: they are large, oblong, and conſiderably broad, undivided at the edges, and ſharp-pointed.

The flowers ſtand in the boſoms of the leaves, and have ſhort footſtalks; two ſtand together, one in the boſom of each leaf of the pair, and ſo all the way up the ſtalk: they are large and yellow, and have a very fragrant ſmell.

The ſeed-veſſel is of a heart-faſhioned ſhape.

The ſeeds are winged.

It is a native of Virginia, and has been called by many names.

Plukenet calls it *Syringa volubilis Virginiana, myrti majoris folio, alato ſemine, floribus odoratis luteis.* Cateſby, *Jaſminum luteum odoratum Virginianum ſcandens ſempervirens.* Ray and others allow it as a *Bignonia.*

2. Finger-leaved Trumpetflower.

Bignonia foliis digitatis.

The root is long, ſpreading, and full of fibres.

The ſtem is woody, and the bark brown, with a tinge of red.

The leaves are of a very beautiful colour and figure: five grow on every footſtalk, and are diſpoſed in a digitated manner: three of the five ſtand forwards, and have long footſtalks; two are ſhorter and ſtand back, and theſe have alſo very ſhort footſtalks: they are of a firm ſubſtance, and their colour is a bright green.

The flowers are very large, and white.

The ſeed-veſſel is long, in the manner of a pod, and when ripe it ſplits at the end.

It is a native of Jamaica, and grows on the banks of waters, and in damp places: it flowers in July.

Sir Hans Sloane has deſcribed it under the name of *Nerio affinis ſiliquoſa, folio palmato flore albo.*

GENUS VI.

BEARS BREECH.

ACANTHUS.

THE flower conſiſts of a ſingle petal, and approaches in ſhape to the labiated kind: the whole is formed into two parts, a tube and a ſingle lip. The tube is very ſhort: there ſeems an upper lip wanting; the lower, which is its only lip, is very long, and divided into four obtuſe ſegments: the cup is of a ſingular ſtructure, as well as the flower: it conſiſts of ſix leaves; two are placed ſideways, oppoſite, and erect, and theſe are ſmall; two are again placed oppoſite, and ſtand at top and bottom; theſe are larger; and there are beſide theſe, two other very minute ones, whoſe poſition is alſo ſideways. The ſeed-veſſel is oval.

Linnæus places this among the *didynamia angioſpermia*; the threads in each flower being four, two longer and two ſhorter, and the ſeeds contained in a capſule.

1. Smooth

Purple Clandestine

Round Birthwort

Climbing Birthwort

Small Birthwort

Smallroot Birthwort

long Birthwort.

Spear Pointed Birthwort

Jagged leaved Geranium

Deep green trumpet flower

Bears Breech

Narrow leavid Gerardia

Smooth Chelone

finger leavid Trumpet flower

Prickly Bears Breech

four Spiral Barleria

Holly leaved Acanthus

Oblong leaved Solanum

Variegated leaved Solanum

Procumbent Ruellia

1. Smooth Bears Breech.

Acanthus mollis.

The root is long, ſlender, white, divided into many parts, and furniſhed with numerous fibres.

The firſt leaves are large, and extreamly beautiful: they riſe in cluſters ten or twelve together, and have no footſtalks: they ſpread as they grow up, and ſome lie upon the ground, while thoſe in the middle keep more erect.

Theſe leaves are long, and conſiderably broad, deeply divided into three or four pairs of large ſegments at the edges, and they terminate in a larger portion, of the ſame form, at the point: theſe ſeveral parts are all irregularly indented at the edges, and give the leaf the aſpect of thoſe of the pinnated kind, though they are not divided nearly to the rib: the colour is a beautiful deep green, and the ſurface gloſſy. The curious reader will not be offended at ſo long and minute a deſcription of a leaf admired ſo extreamly for its beauty among the antients, and copied into ſo many of their ornamental works.

The ſtalk riſes in the centre of this cluſter of leaves, and is thick, firm, upright, and three feet high: the leaves ſtand irregularly on it, and are large toward the bottom, and ſmaller near the top; ſo that they give the whole plant a conical figure: thoſe on the upper part of the ſtalk are more divided at the edge, and thoſe at the lower part leſs.

The flowers ſtand in a long, thick ſpike, terminating the ſtalk, and are large and white.

The ſeed-veſſels are large, and the ſeeds are ſmall.

It is a native of Italy, and of the Greek iſlands, and flowers in June.

C. Bauhine calls it *Acanthus ſativus ſive mollis Virgilii.* Others, *Branca urſina*, and *Acanthus ſativus*, and *Acanthus mollis.* We call it *Brank urſine*, or *Bears breech.* It grows very well in our gardens.

A great deal of learned nonſenſe has been put together by criticks on the ſubject of the *acanthus* of the antients: but had they been better botaniſts they would have been more in a condition to have underſtood their authors; and would have ſaved their readers much trouble.

The names *acanthus* and *acantha* occur very frequently in the writings of the Greeks and Romans, and are often uſed for different prickly ſhrubs and plants, according to the more or leſs accurate expreſſion, or determinate meaning of their authors; but the reader at this time is little concerned about any except the one plant, properly, determinately, and generally, called *Acanthus.* This was the herb whoſe leaves they have ſo much celebrated for their beauty; and which, we find, their artiſts have introduced into various kinds of carved work, and of which the leaves in the capital of the Corinthian order in architecture are formed. This is the proper *acanthus*, and is the kind here deſcribed and figured.

Its greateſt fame is in the capital juſt named, which, we are told, Callimachus formed upon the model of a baſket, covered with a tile, and ſurrounded with the leaves of an *acanthus* plant, upon whoſe root it had accidentally been ſet. This baſket continues the vaſe of the capital; the leaves and ſtalks are the ornaments with which it is covered; and the tile forms its abacus.

Such was the original Corinthian capital; but ſculptors, even in thoſe ages of chaſter taſte, had the error, ſo common at this time, of ſuppoſing every thing that is laboured muſt be beautiful. Inſtead of the great and noble ſimplicity of this natural leaf, they ſoon began to decorate it with more carving: they ſplit the edges of its ſeveral ſegments, variouſly into three, or into five diſtinct and ſeparate leaves: theſe they left plain and even at the edges; and, becauſe the form of the whole was altered, they called the firſt variation, where the diviſion was into three, the *laurel*, and the other, where it was into five, the *olive* leaf. In both, the proper form and beauty of the leaf are loſt: it is neither noble nor in nature: it becomes a monſtrous production of ignorant art: the whole is a body of *acanthus* leaf bearing olive or laurel leaves at its top and ſides.

One grieves to ſee this in the antique, but the remains of many of their great works are diſgraced by it. The leaves on the capitals of the columns in the temple of Veſta at Rome are of the laurel kind; thoſe of the Baſilick of Antonine of the olive; and there are many more inſtances, needleſs to be recounted here, both of one and the other diviſion. In the temple of Veſta at Tivoli we ſee the true *acanthus*. Nothing reflects more upon the taſte of architecture, in that time of its eminent glory, ſo much as this inſult upon nature; the preferring to her great ſimplity the littleneſs of art.

2. Prickly Bears Breech.

Acanthus aculeatus.

The root is long, thick, uſually ſingle, but furniſhed with many ſmall fibres.

The leaves that riſe from it are very large and beautiful; but they have not the elegant ſimplicity of thoſe of the former kind: they are long and broad, and are divided ſo deeply into many pairs of ſegments that they very much reſemble the pinnated form, but they are not cut to the middle rib: theſe ſegments are notched at the edges, and the whole leaf is covered with long, white, and ſharp prickles.

The ſtalk riſes in the centre of this tuft, and is thick, firm, upright, and two foot and a half high.

The leaves that ſtand on it are like thoſe from the root, but leſs divided, and of a paler green.

The flowers are large and white, and they ſtand in a thick ſpike terminating the ſtalk.

The ſeed-veſſel is large and oblong; and the ſeeds are ſmall.

It is not uncommon in Italy, growing moſtly in damp ſhady places about the edges of rivers and in thickets. It flowers in June.

C. Bauhine calls it *Acanthus aculeatus.* Others, *Acanthus ſilveſtris.*

This ſpecies was known to the antients as familiarly as the former, but they did not much regard it. Some of more depraved taſte introduced its figure into ornaments of carved work; but it makes a confuſed and poor appearance. The true *acanthus* leaves have an open freedom and an eaſy grace not found in any of theſe, whether from art or nature.

Beſide the variations we have named in the Corinthian capital, where the antients cut the ends and tops of the *acanthus* into laurel and olive leaves, we are to mention that in the remains of what is called the compoſite order, theſe ends are cut and ſplit with the chiſſel much farther than in nature. In this ſtate they are called parſley leaves; and we ſee an inſtance of them in the compoſite columns of the arch of Severus, and elſewhere: but they are here more pardonable, though no where to be commended. The Romans had a right to indulge their fancy in this compoſition (for it does not deſerve the name of an order), becauſe it was of their own invention; but they are inexcuſable in maiming the Corinthian, a proper and diſtinct order, and the inventions of their maſters the Greeks, the fathers of ſcience.

3. Holly-leaved Acanthus.

Acanthas foliis aquifolii.

The root is long and ſpreading.

The ſtalks are numerous, large, woody, and armed with many ſhort, but very ſharp and ſturdy prickles: they are tough, and covered with a pale greyiſh rind.

The leaves are large, oblong, conſiderably broad, and of a bluiſh green colour: they are deeply and very irregularly divided into three or four ſegments on each ſide, and theſe all end in prickles: they terminate alſo in a ſhort, irregular, prickly point at the extremity.

The flowers grow at the tops of the branches, and are very large and gaping.

The ſeed-veſſels are large and double; and the ſeeds are ſmall.

It is a native of the Eaſt Indies.

Commelin calls it *Carduus aquaticus ſylveſtris inodorus*. Pitiver, *Acanthus Malabaricus agrifolio folio*.

The root is eſteemed good in the gravel. The roots of the *common acanthus* have the ſame virtues, operating by urine, but not in a degree worth notice.

GENUS VII.

BARLERIA.

THE flower conſiſts of a ſingle petal, and approaches to the labiated kind: it is formed into a tube, a body, and two lips: the tube is ſhort, and is contained in the cup: the body is oblong and ſwelled: the upper lip is nip'd at the end, and ſtands erect: the under one is divided into three ſegments; the middle one of which is juſt of the figure of the entire upper lip: the cup is divided into five ſlender ſegments; and the ſeed-veſſel is oblong and ſquare.

Linnæus places this among the *didynamia angioſpermia*.

1. Four-prickled Barleria.

Barleria ſpinis quaternis.

The root is large, divided into many parts, and full of ſpreading fibres.

The ſtem is hard, woody and covered with a brown bark.

There are numerous and very ſharp prickles on the branches, and they are diſpoſed very regularly, four together, in form of a croſs.

The leaves are large and oblong: they ſtand in pairs, and have very ſhort footſtalks: they are of a bright green, undivided at the edges, and ſharp-pointed.

The flowers riſe from the boſoms of the leaves, and are large and beautiful: each has its ſeparate ſhort footſtalk, and there generally grows a tuft of young leaves about them.

The ſeed-veſſel is large, and ſpread on the ſurface; and the ſeeds are numerous, rounded, and flat.

It is a native of the Eaſt Indies, and flowers in July.

Plukenet calls it *Melampyro cognata maderos patana ſpinis horrida*. The Indians, *Coletta veetla*.

GENUS VIII.

OILY-GRAIN.

SESAMUM.

THE flower conſiſts of a ſingle petal, and ſomewhat approaches to the labiated kind: the whole is formed into a ſmall tube, an inflated body, and a divided edge: the tube is ſhort, and contained within the cup: the body is large and broad, deep and hollow; the edge is divided into five parts, four of which are broad and equal, and the fifth narrow, and altogether different from the reſt: the cup is divided into five ſmall ſegments at the edge: the ſeed-veſſel is large, oblong, and ſquare, and contains numerous ſeeds.

Linnæus places this, as the others, among the *didynamia angioſpermia*; the threads in each flower being four, two of which are longer and two ſhorter, and the ſeeds contained in a capſule.

1. Long-

1. Long-leaved Seſamum.

Seſamum foliis oblongis.

The root is long, thick, and furniſhed with many fibres.

The firſt leaves are long and large: they riſe in a thick cluſter, and have ſhort footſtalks; and their colour is a pale green: they are broadeſt toward the baſe, ſharp at the point, and ſlightly indented at the edges.

The ſtalk is thick, firm, upright, and not at all branched: it is two foot and a half high, and is of a pale green, and ſtriated on the ſurface.

The leaves are numerous, and of a pale green: they are perfectly like thoſe from the root, only ſmaller and leſs indented, and ſometimes not at all ſo.

The flowers are large, and white, with a tinge of purpliſh; ſometimes altogether red: they riſe from the boſoms of the leaves, and ſtand on ſhort, ſlender footſtalks.

The ſeed-veſſel is long and large, and contains a large quantity of ſeeds.

It is a native of Zeylon and Malabar, and is ſown in fields about Adrianople.

Burman calls it *Digitalis orientalis ſeſamum dicta*. Others, only *Seſamum*. The flower ſomewhat reſembles foxglove, whence it has obtained the name of *oriental foxglove*; but the ſeed-veſſel is perfectly different, and makes it another genus.

An oil is made from it in Turkey, and is famous in many external applications. We uſed to have it here, but it is of late neglected entirely. It is eſteemed good againſt headachs, and a few drops put into ears for deafneſs.

2. Various-leaved Seſamum.

Seſamum foliis variis.

The root is long, large, and white: it penetrates deep into the ground, and has a few fibres.

The firſt leaves are oblong, broad, ſmall, and of a deep green: they have ſhort footſtalks, and are undivided at the edges.

The ſtalk is round, firm, upright, and not at all branched.

The leaves grow in pairs, but they are conſiderably different in form on the various parts of the plant: thoſe which grow lowermoſt are divided into three parts, two ſhort toward the baſe, and one long, which terminates them; and all theſe are indented at the edges. The upper leaves are oblong, narrow, and indented; they are broadeſt at the baſe, and ſmaller all the way to the point; and they have long and ſlender footſtalks.

The flowers grow in the boſoms of the leaves: they are very large, and have ſeparate ſlender footſtalks.

The ſeed-veſſel is long and ſquared; and the ſeeds are numerous.

It is a native of the Eaſt Indies, and flowers in July.

Plukenet calls it *Seſamum alterum foliis trifidis.*

GENUS IX.

RUELLIA.

THE flower conſiſts of a ſingle petal, and approaches to the labiated form: it conſiſts of a ſhort tube, hid within the cup; an open and drooping neck; and, above that, an edge divided into five ſegments: two of theſe which ſtand upward are ſomewhat reflex; the other three point downward, and are more ſtrait: the cup is formed of a ſingle leaf, divided at the edge into five narrow ſegments; and the ſeed-veſſel is long, ſlender, rounded, and pointed at each end.

Linnæus places this among the *didynamia angioſpermia*; the threads in each flower, as in moſt of the preceding ſpecies, being four, two of which are longer and two ſhorter; and the ſeeds being thus contained in a capſule.

The firſt of theſe characters they enjoy in common with the flowers properly of the labiated kind; thoſe having four threads, which are thus of unequal lengths: the other is peculiar, for the ſeeds of all the plants properly of the labiated kind ſtand in the bottom of the cup.

This ſhews, that the particular arrangement of the threads, two long and two ſhort, which is one of the moſt ſingular characters in the method of Linnæus, is not, nor can be, the proper mark of a claſs: though he has made it ſo; becauſe of the numerous plants which have the threads in this number and order, ſome have the ſeeds naked, others regularly contained in a capſule.

Linnæus ſaw this difference, and arranged the plants under two ſeparate heads, though in the ſame claſs: but this is the ſame error Ray made, in making the regular and irregular monopetalous flowers only a ſub-diſtinction; whereas it is truly, and in nature, a claſſical character.

Procumbent Ruellia.

Ruellia procumbens.

The root is white, ſmall, and thready.

The ſtalks are numerous, round, yellowiſh, ſlender, and five or ſix inches long: they lie every way ſpread upon the ground, and frequently take root at the joints.

The leaves ſtand in pairs, and are ſhort and broad: they are ſharply ſerrated at the edges, obtuſe at the end, and of a freſh green.

The flowers grow at the tops of the ſtalks, three or four in a little cluſter, and are of a pale red.

The ſeed-veſſel is long, and the ſeeds are numerous and ſmall.

It is a native of the Eaſt Indies and the American Iſlands, and flowers in May.

Plukenet calls it *Gentianella impatiens foliis agerati.* In Barbadoes they call it *Snapgraſs.*

The END of the FIFTH CLASS.

THE

THE

BRITISH HERBAL.

CLASS VI.

Plants whoſe flower is compoſed of TWO PETALS, *and is followed by a* SINGLE CAPSULE.

THIS is a claſs extreamly diſtinct; and characteriſed by the moſt plain and obvious marks.

It contains but a very ſmall number of plants; but one would imagine no ſyſtem could err ſo far from the path of nature as to add any more to it, or to ſeparate theſe; the characters by which they are diſtinguiſhed from all other plants, and allied to one another, being ſo extremely ſingular and ſtriking: yet, in the modern methods and ſyſtems of botany, there is no place appropriated to theſe; but they ſtand at random among others.

Linnæus has placed the *water ſtarwort* in his claſs of *monandria*, and the *enchanter's nightſhade* in his claſs of *diandria*; becauſe there is but a ſingle thread in the flower of the former, whereas there are two in that of the latter: on theſe minute parts is the attention of that author ſo fixed, that theſe plants, are ſeparated by the means of the threads; although they agree with one another in the flower and ſeed-veſſel; and have in both a character which is in common with few others.

Theſe are the moſt uſeful diſtinctive marks: the more conſpicuous ſuch characters are, and the fewer plants they unite, the clearer and more familiar will be the method, and the eaſier and plainer the ſtudents road to the ſcience.

Mr. Ray includes theſe plants and thoſe which have three petals to the flower, and a ſingle capſule for the ſeed, together in one claſs. He ſeems in this to have been influenced only by the ſmall number there are of plants belonging to each; but this, as we have obſerved, is a happineſs, or thing to be ſought, not avoided: we ſhould obſerve nature ſtrictly where it is found; and not confound her diſtinctions, by joining plants where ſhe has ſeparated them ſo plainly. Mr. Ray makes the number of petals a mark of diſtinction for a claſs in other caſes where the ſeed-veſſel is ſingle; and there is the ſame cauſe here. If the *pentapetalæ vaſculiferæ*, or thoſe which have five petals and a ſingle ſeed-veſſel, be claſſically diſtinct from the *dipetalæ* and *tripetalæ*, thoſe which have two, and three petals and a ſingle ſeed-veſſel; ſo are theſe two kinds, the *dipetalæ*, and *tripetalæ*, from one another: the reaſon is exactly the ſame, and he who uſed the character taken from the number of petals as a claſſical mark in one place, ſhould not have refuſed it in another.

SERIES I.

Natives of BRITAIN.

Thoſe of which there are one or more ſpecies native or wild in this kingdom.

GENUS I.

WATER-STARWORT.

STELLARIA.

THE flower is compoſed of two petals, and has no cup: the ſeed-veſſel is round and compreſſed.

Linnæus places this among his *monandria digynia*; there being only one thread in each flower, and the ſtyles, or filaments, from the rudiment of the capſule being two.

This author takes away its uſual name *ſtellaria*, and calls the genus *coriſpermum*; uniting with it, under that name, the *rhagroſtis*, a diſtinct genus, as we ſhall ſhew in its place.

DIVISION I. BRITISH SPECIES.

1. Common Water-Starwort.

Stellaria vulgaris.

The root is a great cluſter of long and ſlender fibres.

The ſtalks are numerous, green, ſlender, very weak, and a foot or two in length: they riſe to the ſurface of the water uſually, as the moſt common place of its growth is in ſhallow ditches.

The leaves grow in pairs all the way up the ſtalks, but at the tops in cluſters: thoſe on the ſtalks are longiſh, narrow, and of a pale green: they have no footſtalks: they are pointed at the ends, and undivided at the edges.

The leaves on the top form themſelves into a kind of head: they are ſmalleſt in the centre, larger all the way outwards, and ſpread in the manner of a ſtar, whence the plant has its name.

The flowers are ſmall: they ſtand at the joints of the ſtalks, where the leaves alſo riſe; and there uſually are two of them together: they are whitiſh, and the two petals which compoſe them are hollow, and converge together: there is a ſingle yellow button to each, ſupported on a long thread.

The ſeed-veſſel is rounded, flat, and marked with four lines on the ſurface.

The ſeeds are numerous and ſmall.

It is common in our ditches, and flowers in May.

C. Bauhine calls it *Stellaria aquatica*. Others, *Stellaria aquatica vulgaris*.

2. Blunt-leaved Water-Starwort.

Stellaria repens foliis obtuſis.

The root is compoſed of numerous very ſlender fibres.

The ſtalks are many and weak: they are round and jointed: they riſe but a little height in the water, where they are covered; but when the plant grows in mud, as is common, with very little water, then they lie ſpread every way upon the ſurface; and, in both caſes, wherever they touch they take root at the joints.

The leaves are few, and of a faint green: they grow in pairs, and have no footſtalks: they are ſhort, and rounded at the end: at the top of the ſtalk there ſtand four, or more, in a little cluſter, but not diſpoſed with that regularity we ſee in thoſe of the former ſpecies.

The flowers are ſmall and white: they are placed in the boſoms of the leaves, and the petals of which they are compoſed ſtand wider than in the other.

The ſeed-veſſel is ſquare, but flatted: the ſeeds are very numerous and minute.

It is common in puddles and about the edges of fiſh-ponds, and flowers in April.

C. Bauhine calls it *Lenticula paluſtris bifolia fructu tetragono.* Dillenius, *Stellaria minor et repens.*

3. Long leaved Water-Starwort.

Stellaria longifolia.

The root conſiſts of fibres, but they are not, as in the others, long and ſlender; they make a very thick head of ſhort ones almoſt innumerable.

The ſtalks are numerous, weak, and a foot or more in length.

The leaves ſtand in pairs on the ſtalks, and in a ſtarry tuft at the top: thoſe on the ſtalks are long, narrow, and often curled at the edges, and ſplit at the points: the others are ſharp pointed, and ſpread upon the ſurface, in form of a ſtar.

The flowers are very ſmall, and yellowiſh: each is compoſed of two narrow petals, and in the centre there riſes a ſhort filament with a yellow button.

The ſeed-veſſel is rounded and flat: the ſeeds are very numerous and ſmall.

It is common in ſalt-water ditches, and ſometimes in freſh. I have obſerved it abundantly in the ditches on the iſle of Shipey.

It flowers in June.

Ray calls it *Stellaria aquatica foliis longis tenuiſſimis.*

DIVISION II. FOREIGN SPECIES.

1. Alternate-flowered Water-Starwort.

Stellaria floribus alternis.

The root is compoſed of many ſlender threads, of a whitiſh colour, and very tender ſubſtance.

The ſtalks are numerous, round, and of a pale green.

The leaves are long, narrow, and of a dead green, undivided at the edges, and ſharp at the points.

The flowers ſtand alternately, and are compoſed each of two flatted and ſomewhat hooked petals, in the midſt of which riſes a ſingle filament with a large button.

The ſeed-veſſel is roundiſh and flatted.

It is common about the ſhores of the Volga; and flowers in July.

Juſſieu calls it *Coriſpermum floribus lateralibus.*

Nothing is known of the virtues of theſe plants.

GENUS II.

ENCHANTERS NIGHTSHADE.

CIRCÆA.

THE flower is compoſed of two petals, divided at the ends, and ſpread open: the cup conſiſts of two ſmall, oval leaves, and falls with the flower: the ſeed-veſſel is oval and rough, and contains only two ſeeds.

Linnæus places this among the *diandria monogynia*; there being two threads in each flower, and the ſtyle from the rudiment of the capſule ſingle.

DIVISION I. BRITISH SPECIES.

Common Enchanters Nightſhade.

Circæa lutetiana.

The root is large and ſpreading, and is furniſhed with many fibres.

The ſtalk is round, firm, upright, and ten inches high.

The leaves ſtand in pairs, and have long footſtalks: they are of an oval figure, and terminate in a ſharp point; they are broadeſt at the baſe, and ſmaller all the way to the extremity; their colour is a deep beautiful green; and they are a little indented at the edges, but it is ſlightly and irregularly.

The flowers ſtand in a long ſpike at the top of the ſtalk: they are ſmall and white; each has its ſeparate footſtalk; and they ſtand in a very regular manner: when the plant has been any time in the flower theſe occupy the top of the ſpike, and ſeed-veſſels hang from their footſtalks on the lower part: beſides the larger ſpike which terminates the ſtalk, there are uſually ſmaller from the boſoms of the upper leaves. The two petals of which each flower is compoſed are ſo ſplit that it ſeems to have four.

The ſeed-veſſels are ſmall and rough.

It is a native of our woods and thickets, and flowers in April.

C. Bauhine calls it *Solanifolia circæa dicta major.* Others, *Circæa lutetiana*; or ſimply *Circæ.*

DIVISION II. FOREIGN SPECIES.

1. Dwarf Enchanters Nightſhade.

Circæa minima.

The root is white, and ſpreads under the ſurface.

The ſtalk is round, weak, and in part procumbent: it is four inches long, and lies half that length upon the ground.

The leaves are broad and ſhort, largeſt at the baſe, and ſmaller to the point, not at all indented at the edges, and of a blackiſh green.

The flowers ſtand in a ſpike at the top of the ſtalk, and are white, with a bluſh of red: the cup is whitiſh, and coloured at the edges.

The ſeed-veſſels are ſhort, and roundiſh rather than oval.

C. Bauhine calls it *Solanifolia Circæa alpina.* Linnæus, *Circæa caule adſcendente racemo unico.*

2. Broad-leaved Circæa.

Circæa latifolia.

The root is long, thick, and ſpreading.

The firſt leaves are very large, and of an oval figure; broad at the baſe, and obtuſe at the ends: there are only two or three of them in a tuft; and they have ſhort footſtalks.

The ſtalk is round, upright, firm, hairy, and two feet high.

The leaves ſtand in pairs, and have long footſtalks: they are broad and oblong, widely ſerrated, and ſharp-pointed; and their colour is a beautiful deep green.

The flowers are white, with a tinge of purple ſometimes, but not always; they ſtand in long ſpikes on the top of the ſtalk, and on branches riſing from the boſoms of the upper leaves: the ſeed-veſſel is large and rough.

It is a native of North America, and flowers in May.

Tournefort calls it *Circæa canadenſis latifolia flore albo.*

Nothing is certainly known of the virtues of theſe plants.

The END of the SIXTH CLASS.

THE

THE BRITISH HERBAL.

CLASS VII.

Plants whoſe flower is compoſed of THREE PETALS, *and is followed by a* SINGLE CAPSULE.

THIS claſs has all the advantages of the laſt, in being clearly, familiarly, and obviouſly diſtinguiſhed: like that alſo it comprehends only a few plants; and there is the ſame reaſon for keeping them ſeparate from all others, the rendering the path to the ſcience eaſy and plain.

Linnæus, however, ſeparates them into very diſtant parts of his works, placing the *frogbit* among his *dioecia enneandria*, and the *ſtratiotes* among the *polyandria hexagynia*.

Mr. Ray joins the plants of this, as we before obſerved, with thoſe of the laſt claſs; but he is much more excuſable than Linnæus in ſeparating them ſo widely one from another.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are native of this country.

GENUS I.

FROGBIT.

HYDROCHARIS.

THE flower is compoſed of three roundiſh petals, which ſpread evenly open: the cup is compoſed of three ſmall, oval leaves: the ſeed-veſſel is ſkinny, roundiſh, and divided into ſix cells.

Linnæus places this among his *dioecia enneandria*; ſome plants of it having only male, and the other only female flowers; and the ſtamina in the male flowers being nine.

The difference in the male and female plants of this genus is this, that in the male three flowers grow together, and there is a general huſk for them, beſide the particular cup for each; and in the female the flowers ſtand ſingle, having only their proper three-leaved cup, and are ſucceeded by a capſule, which thoſe of the male plants are not. This is all the obvious difference; but, when cloſer examined, the female flowers are found to have no threads.

Of this plant there is only one known ſpecies, and that is a native of Britain.

Common

Common Frogbit.

Hydrocharis vulgaris.

The root conſiſts of ſeveral very long and thick fibres.

From theſe riſe alſo cluſters of leaves and ſide-ſhoots: theſe laſt are long and ſlender; and, as they ſpread every way from the central root, they ſend up alſo tufts of leaves, and, downwards, roots like the firſt.

The leaves riſe ten or twelve together, and are ſupported on long, thick footſtalks of a ſpungy ſubſtance.

They are round, but indented in a heart-faſhioned manner at the inſertion of the ſtalk, and are thick, ſmooth, and of a dead green.

The flowers are large and white: they ſtand on long, ſlender footſtalks.

The ſeed-veſſels are large and rounded; and the ſeeds are numerous and ſmall.

It is common in ditches ſwiming on the water.

It flowers in July.

C. Bauhine calls it *Nymphæa alba minima*. Others, *The leaſt waterlilly*, *Frogbit*, and *Merſus ranæ*.

It has ſometimes double flowers, and is in that condition deſcribed by ſome as a diſtinct ſpecies; but this is only a variety from rich and abundant nouriſhment. I obſerved a whole ditch near Thorny in the iſle of Ely covered with this double flowered kind; the water was thick and rediſh.

The country people make a pultice of the freſh leaves boiled in milk, which they lay to ſwellings: but nothing is known farther of its virtues. It is not uſed in the ſhops.

GENUS II.

WATER SOLDIER.

STRATIOTES.

THE flower is compoſed of three petals, which are broad: there are two cups, the one is a huſk compoſed of two membranes, which remains with the ſeed-veſſel; the other is formed of a ſingle leaf, divided into three ſegments, and falls off with the flower: the ſeed-veſſel is oval, but marked with ſix edges, and is divided within into ſix cells, and contains numerous ſeeds.

Linnæus places this among the *polyandria hexagynia*; the threads being numerous, and the ſtyles from the rudiment of the capſule ſix, anſwering to the ſix ſeparate cells or diviſions in the fruit: the ſeeds are crooked.

Common Water Soldier.

Stratiotes vulgaris.

The root is compoſed of ſeveral long, thick, white fibres with tufted ends: they are naked from the top to the bottom but juſt at the extremity they have ſeveral ſmall, ſhort filaments, which ſpread every way.

From this root riſe numerous leaves of a ſingular figure: they are long and narrow, thickeſt and broadeſt at the baſe, and ſharp at the point: they are fleſhy, firm, of a deep green colour, and armed with ſlight prickles along the edges.

The ſtalks riſe among theſe, and are naked, round, thick, and of a pale green.

The flowers are large and white, with a tuft of yellow threads in the centre.

The ſeed-veſſel is large, and the ſeeds are long, crooked, and, as it were, winged.

It is common in the fen countries, the iſle of Ely, and elſewhere; and flowers in July.

It ſwims upon the water, or is ſometimes half way buried in it; and, though the roots are conſiderably long, they rarely reach the bottom.

C. Bauhine calls it *Aloe paluſtris*. Others, *Aizoon paluſtre*, and *Militaris aizoides*, and *Aloides*.

Nothing is known of a certainty of its virtues; but the old women uſe it externally as cooling and repellent.

The END of the SEVENTH CLASS.

THE

BRITISH HERBAL.

CLASS VIII.

Plants whoſe flower is compoſed of FOUR PETALS, *and is ſucceeded by a* SINGLE REGULAR CAPSULE.

THESE are plants as evidently allied to one another, and as evidently diſtinguiſhed from the reſt as thoſe of the preceding claſs, ſince nothing can be a plainer claſſical character than four petals in a flower, and a ſingle capſule ſucceeding; yet they are diſperſed over ſeveral parts of the works of Linnæus, and all the modern writers.

The ſtudent, in this method of ours, needs only examine the number of petals and the ſeed-veſſel, to know to what claſs to refer, or where to look for a plant of this deſignation: in thoſe he will receive no information on either head from ſuch an obſervation; but muſt count the threads in the plaintain, and thoſe in willow-herb, to find where to ſeek them in his author, and to diſcover, that one having four belongs to the claſs of *tetrandia*, and the other having five to that of *pentandria*; while the poppy, becauſe it has them more numerous, and fixed to the receptacle, is to be ſought for among the *polyandria*, in a very diſtant part of the book.

The ſtudent will here find all the plants which have four petals, and a ſingle regular capſule, together: but let him obſerve here the diſtinction between the *capſule* and the *pod*. As theſe names are diſtinct in Engliſh, ſo they are in other languages. The Latin writers conſtantly expreſs one by *capſula*, the other by *ſiliqua*; and though both are ſeed-veſſels, they are perfectly diſtinguiſhed.

This is the more needful to be obſerved here, becauſe there is another great family to be diſtinguiſhed by having four petals in the flower, and a *pod* or *ſiliqua* following.

The diſtinction will be ſhewn when we come to treat of that claſs. What is contained in the preſent aſſortment is that family of plants in which the petals are four, and the ſeed-veſſel is a capſule, ſuch as thoſe of the ſeveral preceding claſſes, and not a pod.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are wild in this country.

GENUS I.

POPPY.

PAPAVER.

THE flower is compoſed of four large, broad, petals: the cup is a huſk, compoſed of two oval leaves: the ſeed-veſſel is crowned with a top, under which there are ſeveral ſmall openings; and the ſeeds are numerous.

Linnæus places this among the *polyandria monogynia*, the filaments in the flower being numerous, and fixed to the receptacle, and the rudiment of the fruit ſingle, and with a ſingle top, without any ſtyle.

DIVISION I. BRITISH SPECIES.

1. Red Poppy.

Papaver rhœas.

The root is long, white, and ſlender, and has very few fibres.

The firſt leaves, which riſe immediately from it are large, long, of a pale green, deeply jagged, and without footſtalks.

In the centre of theſe riſes the ſtalk, which is round, weak, of a pale green, and hairy; it is two feet high, tolerably erect, and divided into ſeveral branches.

The leaves on it are placed irregularly, and reſemble thoſe from the root, but that they are more deeply jagged, and divided at the edges: theſe alſo are of a pale green, and hairy, and they and the whole of the plant abound with a yellow bitter juice.

The flowers are very large, and of a bright ſcarlet, with numerous threads in the centre; on which ſtand black buttons.

The ſeed-veſſel is ſmall, oblong, and crowned with a flat head: the ſeeds are very numerous.

It is common in our corn-fields, and flowers in July.

C. Bauhine calls it *Papaver erraticum majus*. Others, *Papaver erraticum*, *Papaver rubrum*, and *Papaver rhœas*.

The flower is ſometimes white, and ſometimes variegated. We ſee this a little in nature, and much more ſo in gardens, where culture renders it very beautiful.

The reader is not to underſtand by this, that all the beautiful garden *poppies* are produced from this ſpecies; for many of them, indeed the greater part, are from the other, next to be deſcribed: the ſmaller, in general, are from this, and they are very beautiful, and very numerous.

2. Wild white Poppy.

Papaver album ſylveſtre.

The root is long, ſimple, and white, and has few fibres.

The ſtalk is round, upright, firm, and a yard high: the leaves ſtand irregularly on it, and are very large, and of a bluiſh green.

They have no footſtalks, but encloſe the ſtalk at the baſe, and from thence grow ſmaller to the point: they are notched at the edges, and ſmooth.

The flowers ſtand at the tops of the branches, into which the ſtalk divides at the upper part: they are very large, but of no great beauty: their colour is white, with a faint bluſh of a deadiſh purple; and they have large black ſpots, one at the bottom of each petal.

The ſeed-veſſel is round and large, of a bluiſh green, and full of irregular, rough, white ſeeds.

The whole plant is perfectly ſmooth, and throughout of the ſame bluiſh green colour.

It is common wild in Ireland. We ſee it in uncultivated places ſometimes in England; but it ſeems to have ariſen from ſeeds ſcattered from ſome garden. In Ireland it is ſaid to be found far from any houſe.

3. Black Poppy.

Papaver nigrum.

The root is long, ſlender, and divided: it has few fibres, and is of a whitiſh colour.

The firſt leaves are ſmall, and inconſiderable: they are long, narrow, divided deeply at the edges, and have no footſtalks.

Among theſe riſes the ſtalk, which is round, thick, upright, and a foot and a half high.

The leaves ſtand alternately, and differ greatly from thoſe which riſe firſt from the root: they are large, and have no footſtalks: their colour is a blackiſh green, and they are deeply jagged.

The flower is large; and there uſually, in the wild ſtate of the plant, ſtands only one on the top of the ſtalk: it is of a deep colour, between blue and black, and has a tuft of threads in the centre.

The ſeed-veſſel is round, and moderately large, and the ſeeds are numerous, ſmall, and black.

It is found wild in the northern parts of Ireland, far from any place where the ſeeds could be ſuppoſed to be ſcattered. It flowers in Auguſt.

C. Bauhine calls it *Papaver hortenſe ſemine nigro*.

Linnæus conſiders this only as a variety of the other preceding: but, however they may reſemble one another when brought into gardens, from the effect of culture, or the mixture perhaps of their farinæ, they are, when in their wild and natural ſtate, perfectly diſtinct.

Both theſe are brought into gardens for uſe and beauty, and the varieties raiſed from them by culture are innumerable.

The black is not much regarded as a medicine; but the *white poppy*, we have deſcribed here in its wild ſtate, is the famous plant, which being properly aſſiſted by culture, affords in this country the *poppy-heads*, of which our ſyrup of diacodium is made; and in Turkey, and other parts of the Eaſt, yields opium.

The plant continues the ſame in all reſpects but ſize when it is thus cultivated; and the greateſt variation in this reſpect is in the head, which in the wild ſtate are not larger than a cheſnut, but by culture is equal to a large apple.

The virtues of all theſe, and thoſe of the ſeveral ſucceeding kinds of *poppies*, are the ſame, but they enjoy them in a different degree.

They are all ſoporifick, and of wonderful virtue againſt pain.

The *black poppy* is ſuppoſed to have ſomething poiſonous, but altogether without reaſon. We have ſhewn that it differs little from the white in form, and it is leſs different in its virtue: however, the white is in repute, and is moſt, indeed almoſt only uſed.

The flowers of the *red poppy* are gently ſoporifick, and are peculiarly good in pleuriſies: they have been extolled by many as a ſpecifick in that diſorder: they are alſo good in quinſies, and in all diſorders of the breaſt.

Our

Our people are not ſufficiently acquainted with their virtues, for they are only kept in the form of a ſyrup in the ſhops; and that way cannot be given in a proper doſe, becauſe of the quantity of ſugar. A ſtrong tincture may be drawn from them in wine, which will better anſwer the purpoſe.

The family-medicine called *red ſurfeit-water* is a tincture of theſe flowers in ſpirit, with ſpices, and other ingredients, and is much preferable to the ſhop form of a ſyrup.

The heads of the *garden poppy*, or *white poppy* cultivated, are gently ſoporifick, and excellent againſt pain. What is called *ſyrup of diacodium* is a very ſtrong decoction of theſe heads boiled up with ſugar; and it contains ſo much virtue, that half an ounce is an effective doſe.

Opium is obtained by wounding and preſſing the heads of the ſame ſpecies, cultivated in the ſame manner in Turkey, and has the greateſt virtues: it is the moſt powerful of almoſt any known vegetable ſimple.

It is ſovereign againſt pain; it promotes ſweat, and cauſes ſleep. A very ſmall doſe is ſufficient, and a larger is dangerous.

Laudanum is a tincture of opium, and is more uſed than the ſubſtance; but either ſhould be given with great care, and rarely without the advice of a phyſician.

There are ſome who accuſtom themſelves to take opium conſtantly; and, beginning with ſmall doſes, they habituate their conſtitutions to the medicine, till they can take ſuch as are aſtoniſhing. To theſe it ſerves as a cordial, enlivening their ſpirits like wine, or any other ſtrong liquor. This is a general cuſtom in the Eaſt.

As the three ſpecies already deſcribed are the principal of the *poppy* kind in virtue, we have given their uſes here; and ſhall now proceed to the account of the ſeveral other ſpecies called by different names, though certainly and plainly of this kind.

4. Round rough-headed Poppy.

Papaver capitulo rotundo hiſpido.

The root is long, ſlender, and white, and has a few fibres.

The firſt leaves are numerous, and beautifully divided into ſegments: they have long footſtalks, and are of a pale green, and conſiderably hairy: they are doubly pinnated, as it were, each conſiſting of ſeveral pairs of pinnæ on a middle rib, and each of thoſe pinnæ being jagged ſo deeply on each ſide, that it appears pinnated again.

The ſtalk riſes in the midſt of this tuft, and is round, hairy, upright, branched, and a foot and a half high.

The leaves are numerous, and ſtand irregularly: they are of the ſame form with thoſe from the root, but ſmaller.

The flowers are ſmall in compariſon of the preceding kinds, otherwiſe not little in proportion to the plant: they are of a bright red, and conſiſt each of four oval petals, with numerous threads.

The ſeed-veſſel is roundiſh, and very rough, being ſet all over with a kind of briſtly hairs: the ſeeds are numerous, ſmall, roundiſh, and black.

It is common in corn fields in many parts of England, and flowers in July.

C. Bauhine calls it *Argemone capitulo breviore*. Others, *Argemone vulgaris*.

5. Long rough-headed Poppy.

Papaver capitulo hiſpido longiore.

The root is long, ſlender, white, uſually undivided, and furniſhed with a few fibres.

The firſt leaves riſe in a cluſter: they are of a pale green, and hairy, and have ſhort footſtalks: they are deeply divided in the pinnated manner; ſo that they ſeem compoſed of ſeveral pairs of pinnæ, or ſmaller leaves, placed on a rib, with an odd one at the end; but they are in reality only ſo many ſegments.

The ſtalks are numerous, round, firm, very much branched, and a foot high.

The leaves on them are few: they ſtand irregularly, and are like thoſe from the root, but ſmaller.

The flowers ſtand at the tops of the branches, and are ſmall, but of a beautiful ſcarlet colour, with black buttons.

The heads are long, and covered with a kind of ſoft prickles.

It is common in many parts of England in corn fields, and on ditch-banks, and flowers in June. The flowers very quickly fade and fall off in this and the preceding ſpecies.

C. Bauhine calls it *Argemone capitulo longiore*; and others follow him.

6. Long ſmooth-headed yellow Poppy.

Papaver capitulo longiore glabro flore luteo.

The root is long, ſlender, white, divided, and full of fibres.

The firſt leaves riſe in a cluſter; and are large, and have long footſtalks: they are properly of the pinnated kind, and very beautiful, each is compoſed of three or four pairs of pinnæ, or ſmaller leaves, ſet on a middle rib, with an odd one at the end.

The ſtalks riſe in the centre of this tuft; and they are round, upright, weak, and a little hairy.

Their leaves are few: and they ſtand irregularly, and are like thoſe from the root, but ſmaller.

The flowers ſtand at the tops of the ſtalks, and are large and yellow.

The ſeed-veſſel is long, ribbed, and ſmooth: the ſeeds are ſmall and numerous.

It is frequent in Wales wild, upon the moiſt rocks, and about the borders of rivulets.

C. Bauhine calls it *Papaver erraticum laciniatum flore flavo.* Others, *Argemone lutea Cambro-Britannica.*

7. Long, ſmall-headed red Poppy.

Papaver capitulo longiore glabro flore rubro.

The root is long, ſlender, white; and hung with many fibres.

The firſt leaves are numerous, long, narrow, and deeply jagged; ſo that they in ſome degree repreſent the pinnated kind.

The ſtalk riſes in the centre of theſe, and is

round, firm, upright, branched, and a foot and a half high.

The leaves ſtand irregularly on it, and are like thoſe from the root, long, narrow, and deeply jagged: ſometimes they ſtand ſingly, ſometimes two, and ſometimes three, riſe from the ſame joint, and this principally at the branching of the ſtalks.

The flowers are ſmall, and of a pale red, ſometimes white.

The ſeed-veſſel is long, and ſmooth.

This is frequent in the corn-fields of Eſſex, and flowers in June.

Moriſon calls it *Papaver laciniato folio capitulo longiore glabro, ſive Argemone capitulo longiore glabro.*

The flowers of theſe ſeveral ſpecies poſſeſs the ſame virtues with thoſe of the *common red poppy*, but in an inferior degree.

DIVISION II. FOREIGN SPECIES.

1. Naked-ſtalked Poppy.

Papaver caulibus nudis.

The root is long, thick, and furniſhed with many fibres.

The firſt leaves are numerous, ſmall, and of a duſky green: they have long, ſlender footſtalks, and are deeply divided at the edges, often quite down to the rib; ſo that they appear pinnated.

The ſtalks riſe among theſe; and they are naked, weak, and round; but though they have no leaves, they have a ſhort ſtiff hair covering them, very thick.

The flowers ſtand ſingly, one on the top of every ſtalk; and they are large and yellow.

The ſeed-veſſel is oblong and rough, and the ſeeds are numerous and ſmall.

It is a native of Switzerland, and other northern parts of Europe, and flowers in June.

C. Bauhine calls it *Argemone Alpina coriandri folio.*

2. Prickly Poppy.

Papaver ſpinoſum.

The root is long and ſpreading, of a white colour, and full of fibres.

The firſt leaves are very large, and of a dead green, marked with white veins, and prickly at the edges: they riſe in a large cluſter, and have no footſtalks: they are oblong, broad, and deeply divided at the ſides, and terminate in a point.

The ſtalk is thick, firm, irregularly upright, of a pale green, and alſo prickly: toward the top it divides into two or three large branches.

The leaves ſtand irregularly on it, and have no footſtalks: they are long, and jagged at the edges, and prickly.

The flowers are large and yellow.

The ſeed-veſſels are oblong and prickly, and the ſeeds numerous and ſmall.

It is a native of South America, and flowers in July.

C. Bauhine calls it *Papaver ſpinoſum.* Moriſon, *Papaver ſpinoſum luteum foliis venis albis notatis.*

Both theſe are of the nature of the other *poppies*; but their virtues have not been particularly regarded.

GENUS II.

HORNED POPPY.

GLAUCIUM.

THE flower is large; it ſtands ſingly, and conſiſts of four petals, which are ſpread regularly open: the cup conſiſts of two oval leaves; and the ſeed-veſſel is long, ſlender, ſquare, and contains only a ſingle cell.

Linnæus places this among the *polyandria monogynia*; the threads in each flower being numerous, and fixed to the receptacle, and the ſtyle from the rudiment of the fruit ſingle.

Mr. Ray joins this to the *poppy*, not allowing it to be a diſtinct genus; but in this he errs. The form of the capſule is ſo extremely different from that of the *common poppy*, that it juſtifies the making it a diſtinct kind; and this, like all other well eſtabliſhed diſtinctions, tends to render the ſcience more familiar.

Some have diſtinguiſhed the ſeveral ſmall-flowered *poppies* from the others, under the name of *argemone*; but as there is not in nature a ſufficient foundation for this diſtinction, it perplexes inſtead of clearing.

Linnæus, who deſerves praiſe for dividing the *glaucium* from the *papaver*, which Mr. Ray omitted to do, lays himſelf open to cenſure, by joining the *glaucium* with the *chelidonium majus*, from which it is abſolutely diſtinct, as we ſhall ſee in the ſucceeding genus. So difficult is it in theſe caſes to preſerve the right medium.

Blunt leaved Water Star Wort

Common Water Soldier

Common-Water Starwort

Enchanters Night Shade

Common Water Soldier

Red Poppy

White Poppy

Black Poppy

Garden Poppy

Round headed Poppy

Long Rough headed Poppy

Long Smooth headed Poppy

Naked stalk'd Poppy

Prickly Poppy

Yellow horned Purple Poppy

Red horned Poppy

Smooth headed Red Poppy

DIVISION I. BRITISH SPECIES.

1. Yellow Horned Poppy.

Glaucium luteo flore.

The root is long, thick, ſcarce at all divided, and furniſhed with numerous fibres.

The leaves that riſe from it are large, and of a bluiſh green: they have no footſtalks: they are long, and conſiderably broad; and are very deeply and irregularly indented at the edges.

The ſtalk is round, thick, ſmooth, of a whitiſh or greyiſh green, and two feet high: it divides into many branches, and ſupports itſelf very erect.

The leaves ſtand irregularly on it, and are large, and like thoſe from the root: they have no footſtalk, but ſurround the ſtalk at the baſe; and they are of a pale bluiſh green colour.

The flowers ſtand at the tops of the ſtalks, and are large and yellow.

The ſeed-veſſel is very long and ſlender, and is crowned at the top: the ſeeds are numerous and ſmall.

It is not uncommon on our ſea coaſts; and flowers in June.

C. Bauhine calls it *Papaver corniculatum luteum.* Linnæus, *Chelidonium pedunculis unifloris.* We, *Yellow horned poppy.*

2. Purple Horned Poppy.

Glaucium flore violaceo.

The root is long, ſlender, white, and furniſhed with a few fibres.

The firſt leaves riſe in a little tuft, and are beautifully divided, without footſtalks, and of a pale green.

The ſtalk is round, ſlender, upright, and a foot or more in height, and alſo of a pale green.

The leaves ſtand irregularly on it, and are, like thoſe from the root, divided into numerous fine ſegments, in a double pinnated manner.

The flowers ſtand at the tops of the ſtalks, and are large, and of a deep blue purple, not unlike that of the common violet.

The ſeed veſſels are long and ſlender, and the ſeeds numerous and ſmall.

It is found in cornfields in ſome parts of England, but is not common. It flowers in Auguſt.

C. Bauhine calls it *Papaver corniculatum violaceum.*

We know nothing of certainty concerning the virtues of theſe plants; but they ſeem to approach to the *poppy* in that reſpect, as well as form; their juice being of the ſame acrid and peculiar bitter taſte with theirs.

DIVISION II. FOREIGN SPECIES.

Hairy, red flowered Horned Poppy:

Glaucium hirſutum rubrum.

The root is long, thick, and undivided, and has very few fibres.

The firſt leaves riſe in a great, upright tuft; and are long, narrow, hairy, and deeply divided at the edges into flat, broad, obtuſe ſegments: they have no footſtalks, and their colour is a dead green.

The ſtalk is round, naked, very much branched, and of a pale green: this is alſo very hairy.

The leaves ſtand irregularly on it, and are divided more deeply than thoſe from the root.

The flowers are ſmall, but of a beautiful ſcarlet colour: they open wide, and have ſome black buttons, ſupported by ſhort threads in the centre.

The ſeed-veſſel is long, ſlender, hairy, and crowned with a top: the ſeeds are numerous and ſmall.

It is common in the ſouth of France, and flowers in July.

Cluſius calls it *Papaver corniculatum phœniceo flore*; and moſt others have copied the ſame name.

GENUS III.

CELANDINE.

CHELIDONIUM MAJUS.

THE flowers are ſmall, and ſtand in cluſters: each is compoſed of four petals, and has a tuft of threads in the centre: the cup is formed of two oval leaves, and ſplits open: the ſeed-veſſel is long, ſlender, and ſquare, and is crowned at the top.

Linnæus places this among his *polyandria monogynia*; the threads in the flower being numerous, and growing to the receptacle; and the ſtyle from the rudiment of the fruit being ſingle.

This author does not allow it a diſtinct genus or name; but joins it, as I have obſerved before, with the horned poppy, under the name of *glaucium*: from this it differs evidently in the ſize and diſpoſition of the flowers; and theſe are ſufficient characters, in the eye of reaſon, for a generical diſtinction, where there are not greater.

Mr. Ray errs more in this caſe than Linnæus; he joins this, as well as the laſt, in one genus with the poppy.

Of this genus there are but two known ſpecies, and both are natives of Britain.

1. Common great Celandine.

Chelidonium majus vulgare.

The root is long, thick, and full of a yellow juice; it is frequently divided, and uſually has many large fibres.

The firſt leaves ariſe in a numerous tuft: they are large, and beautifully pinnated: each is compoſed of three or four pairs of ſmaller leaves, placed on a rib, with an odd one at the end.

The ſtalk is round, weak, branched, and two feet high.

The leaves on it reſemble thoſe from the root, and are of a pale green.

The flowers are ſmall, and of a gold yellow: they grow ſeveral together on the tops of the ſtalks; each having its own ſeparate tender foot-ſtalk.

The ſeed-veſſels are long ſlender pods, containing numerous ſeeds.

The whole plant is full of a deep yellow juice.

It is common in waſte places, and flowers in June.

C. Bauhine calls it *Chelidonium majus vulgare*; and the ſame name is given it by moſt others.

What is called *ſmall celandine* is a very different plant, deſcribed in the firſt claſs of this work under its more proper name *pilewort*.

2. Jagged Celandine.

Chelidonium foliis laciniatis.

The root is long and thick, brown on the ſurface and yellow within, and full of a yellow juice.

The firſt leaves are very large: they have long footſtalks, and ſpread into a broad, as well as high tuft: each is compoſed of about two pairs of ſmaller, placed on their ſeparate footſtalks, on a rib which has an odd one at the end.

The ſtalk is round, weak, hairy, and of a pale green: it is but moderately erect, and little branched.

The leaves ſtand irregularly on it, and reſemble thoſe from the root; but there are uſually a pair of ſmall leaves, at the baſe of each larger, which ſeems compleat without them: the pinnæ, or ſmall leaves, compoſing the larger in this ſpecies, are very deeply and ſharply divided, and hairy.

The flowers are ſmall and yellow: the ſeed-veſſels are long and thick; and the ſeeds are numerous.

It is common in ſeveral parts of England on banks, and flowers in Auguſt.

C. Bauhine calls it *Chelidonium majus foliis quernis.* J. Bauhine, more properly, *Chelidonium majus folio laciniato*; for the leaves of the common kind more reſemble thoſe of the oak than theſe.

It has been conſidered by many, and by Mr. Ray among the reſt, as no more than a variety of the laſt ſpecies; but it is eſſentially different: not only the leaves vary, but the flowers are ſmaller, and the pods are larger.

This and the other both poſſeſs the ſame virtues, but the other, or *common great celandine*, in the greater degree.

It is an excellent medicine againſt obſtructions of the viſcera. It operates both by ſtool and urine; and is good in the jaundice, and obſtructions of the ſpleen: the root beat up with ſugar into a conſerve is the beſt way of giving it for this purpoſe.

It is alſo a cordial and ſudorifick: for this uſe an infuſion is beſt. The root ſhould be cut into ſlices, and boiling water poured on it; and this ſhould be drank warm in bed: it promotes perſpiration, and throws out any thing to the ſkin.

The juice is famous in obſtructions of the liver.

The juice, uſed both outwardly and inwardly, is alſo ſtrongly recommended in diſorders of the eyes.

The root, dried and powdered, is a balſamick and ſubaſtringent: it is given againſt bloody fluxes, and in other hæmorrhages: half a dram for a doſe.

GENUS IV.

WILLOWHERB.

EPILOBIUM.

THE flower is compoſed of four broad petals, with a tuft of threads in the centre: the cup is formed of four oblong, coloured leaves, and falls with the flower: the ſeed-veſſel is very long and ſlender, rounded and divided within into four cells; and the ſeeds are hung with a fine downy matter.

Linnæus places this among the *octandria monogynia*; the threads in each flower being eight, and the ſtyle from the rudiment of the fruit ſingle.

The name by which this genus is commonly diſtinguiſhed in Latin is *lyſimachia*; but that having been given to ſeveral other genera, as the *looſeſtrife* and *ſalicaria*, cannot be retained for this without confuſion. That name was originally given to the *yellow willowherb* or *looſeſtrife*, a genus altogether diſtinct from this, and deſcribed in a preceding claſs: I have therefore appropriated it to that genus; and for this adopted the name *epilobium*, given by Linnæus, and in uſe among moſt of the modern writers, for the ſame diſtinct aſſortment of plants.

DIVI-

DIVISION I. BRITISH SPECIES.

1. Roſebay Willowherb.

Epilobium floribus ſpecioſis.

This is the moſt conſpicuous and beautiful of all the *willowherbs*, and is one of the fineſt of our wild plants.

The root is large, and ſpreading.

The firſt leaves riſe in a thick tuft, and are long, narrow, and of a beautiful deep green on the upper ſide, and of a ſilvery grey underneath: they have no footſtalks: they are perfectly even at the edges, and terminate in a ſharp point.

In the centre of theſe riſes the ſtalk, which is round, thick, firm, upright, and five feet high.

The leaves ſtand irregularly, but very beautifully upon it: they are long, narrow, and even at the edges: they have no footſtalks; and they are alſo of a deep green on the upper ſide, and a ſilvery white below.

The flowers are large and beautiful: they ſtand in a long ſpike, and are of a fine deep red.

The ſeed-veſſels are long, and the ſeeds winged with down.

It is common in many parts of England; and flowers in June. Near Canewood at Hampſtead there is a hedge decorated with it for ſixty yards together.

C. Bauhine calls it *Lyſimachia chamænerion dicta latifolia*. Others, *Lyſimachia ſpecioſa*, and *Onagra ſpecioſa*.

2. Broad-leaved, hairy Willowherb.

Epilobium latifolium hirſutum.

The root is compoſed of numerous fibres, connected to a large head.

The firſt leaves are long, and moderately broad, indented at the edges, lightly hairy, and of a pale green: they have no footſtalks, and riſe in a large tuft.

The ſtalks are numerous, round, rediſh, and four feet high.

They are thick ſet with leaves, which are, like thoſe from the root, of a pale greyiſh green, ſoft to the touch, oblong, broad, and indented: they ſtand irregularly, and adhere to the ſtalk at their baſe.

The flowers are large, and of a pale red: they grow a few together at the tops of the ſtalks.

The pods are long, and full of ſmall ſeeds, with a ſilvery down among them.

It is common by waters, and flowers in June.

The tops of this plant have a light fragrancy. The ſcent has been ſuppoſed to reſemble that of apples in milk, and the plant is thence called by our common people *codlings and cream*.

C. Bauhine calls it *Lyſimachia ſiliquoſa hirſuta magno flore*. Others, *Lyſimachia ſiliquoſa*.

3. Small-flowered, hairy Willowherb.

Epilobium hirſutum parvo flore.

The root is compoſed of a ſmall head, from which run numerous large fibres.

The firſt leaves are oblong, of a dead green, and blunt at the ends.

The ſtalk is round, erect, robuſt, conſiderably branched, and two feet or more in height.

The leaves are long, and moderately broad; of a dead green, hairy, not at all indented, and they are fixed to the ſtalk by their baſe.

The flowers ſtand at the tops of the ſtalks in great numbers, and are ſmall, and of a pale, but lively red.

The ſeed-veſſels are long, and the ſeeds ſmall and yellow.

It is common in damp places, and flowers in June.

C. Bauhine calls it *Lyſimachia ſiliquoſa hirſuta parvo flore*.

4. Great, ſmooth Willowherb.

Epilobium glabrum majus.

The root conſiſts of a vaſt quantity of large and thick fibres ſpreading every way.

The firſt leaves are broad, ſhort, indented, and ſharp-pointed, and of a dead green.

The ſtalk is firm, upright, very much branched, and four feet high.

The leaves ſtand irregularly on it, and are very numerous: they have ſhort footſtalks, and are broad, oblong, and ſharply ſerrated; ſmooth, and of a deep green.

The flowers ſtand in conſiderable numbers at the tops of the branches; and, though the plant is ſo large, they are very ſmall: their colour is a bright red, and they have long, ſlender footſtalks.

The ſeed-veſſels are long, and the ſeeds ſmall.

It is common in damp paſtures, and flowers in July.

C. Bauhine calls it *Lyſimachia ſiliquoſa glabra major*. Others, *Lyſimachia campeſtris*.

5. Narrow-leaved, ſmooth Willowherb.

Epilobium anguſtifolium glabrum.

The root is long, ſlender, and creeping: it runs to a great diſtance under the ſurface, and is furniſhed with many fibres.

The ſtalks are numerous, round, firm, upright, two foot and a half high, and conſiderably branched.

The leaves are very numerous: they ſtand ſo thick that they frequently cover the ſtalk for the greateſt part of its length: they are long, narrow, ſmooth, of a deep green, and not at all indented; but they terminate in a ſharp point.

The flowers are placed at the tops of the branches, and are large, and of a beautiful bright red.

The ſeed-veſſel is long, and the ſeeds are ſurrounded with a great quantity of down.

It is frequent in damp meadows, under hedges, and by the ſides of brooks. It flowers in July.

C. Bauhine calls it *Lyſimachia glabro minor*. J. Bauhine, *Lyſimachia Lævis*.

6. Little

6. Little, ſmooth Willowherb.

Epilobium glabrum minus.

The root is compoſed of numerous fibres.

The firſt leaves are long, narrow, and of a pale green; and they riſe in a thick tuft without footſtalks.

The ſtalk is ſingle, upright, ſlender, rarely at all branched, and a foot and half high.

The leaves are conſiderably long, and very narrow: they are of a pale gloſſy green, perfectly ſmooth, and undivided at the edges, and ſharp-pointed.

The flowers ſtand at the tops of the ſtalk, and are numerous, large, and of a deep red.

The ſeed-veſſels are long and thick.

It is common by rivulets, and flowers in June.

C. Bauhine calls it *Lyſimachia glabra anguſtifolia*. Others, *Lyſimachia glabra anguſtifolia minor*.

7. Round leaved Willowherb.

Epilobium foliis ſubrotundis.

The root is ſmall and creeping.

The ſtalk is round, weak, eight or ten inches high, of a purpliſh colour, and ſcarce upright: it is rarely at all branched.

The leaves ſtand irregularly, and are not very numerous: they are ſhort and roundiſh, not unlike thoſe of the common origanum, perfectly ſmooth, and of a deep ſhining green.

The flowers grow at the top of the ſtalks, and are ſmall, of a beautiful red, and quickly fall off.

The pods are long and thick, and too heavy for the plant to ſupport perfectly.

The ſeeds are ſmall and cheſtnut coloured, and the down about them is ſoft and ſilvery.

It is a native of our northern hills, where it grows by waters; and flowers in Auguſt.

Ray calls it *Lyſimachia ſiliquoſa glabra minor latifolia*.

DIVISION II. FOREIGN SPECIES.

Creeping Willowherb.

Epilobium repens.

The root is ſmall and fibrous.

The ſtalks are round, weak, and ſlender: they trail upon the ground, and take root as they lie, only part of them approaching toward an erect poſture.

The leaves ſtand regularly in pairs: they are ſhort, broad, and of an oval figure, pointed at the ends, not at all indented at the edges, of a deep green colour, and ſmooth: thoſe toward the tops of the ſtalks are ſmaller and narrower.

The flowers are little, and of a pale red.

The ſeed-veſſels are long, ſlender, and have no footſtalk.

It is common on the mountains of Switzerland, and flowers in May.

Haller calls it *Epilobium foliis ellipticis obtuſe lanceolatis totum læve.*

All the ſpecies of *epilobium* have the ſame virtues: they are cooling and aſtringent. The root carefully dried and powdered is good againſt bloody fluxes and other hemorrhages; and the freſh juice is of the ſame virtue.

GENUS V.

SPURGE.

TITHYMALUS.

THE flower is compoſed of four petals, which are thick, cut irregularly, and unequal: the cup is formed of a ſingle piece divided into four ſegments; theſe ſtand alternately mixed with the petals, and all remain together: the ſeed-veſſel is roundiſh, and contains three cells, in each of which there is a ſingle, roundiſh ſeed.

Linnæus places this among the *polyandria monogynia*; the threads in each flower being numerous, and fixed to the receptacle, and the ſtyle from the rudiment of the capſule ſingle.

This author joins the *ſpurge* with the *euphorbium* plant, taking away its antient and received name *tithymalus*, and calling all the ſpecies *euphorbiæ*; for he writes the generical name *euphorbia*.

This is extreamly wrong in two reſpects; in the firſt place it is a violation of the order of nature, no plants being more unlike than the *euphorbia* and many of the ſpurges in their manner of growing; and, in the next place, it muſt create difficulty and confuſion: the ſpecies of each genus, when kept diſtinct, are very numerous, and the number is immoderate when they are thus united.

We ſhall ſhew, when treating of the *euphorbium*, that its angulated, fleſhy ſtalk is a ſufficient diſtinction; nor, indeed, are the flowers of that and *ſpurge* perfectly alike, though they do in many things reſemble one another. The perſon who writes for inſtruction ſhould endeavour to find, not how different genera may be united by ſome ſmall character they have in common, but by what, and principally by what moſt obvious marks, they are ſeparated from one another.



Common wood Celandine



Lesser Celandine



Rose bay Willow herb



Great hairy Willow herb



Small flowerd hairy Willow herb



Great smooth Willow herb



Narrow leaved smooth Willow herb



Little smooth Willow herb



Wood Spurge



Red french Spurge

Rough pruted Spurge



Sea Spurge



Great long leaved Spurge



Petty Spurge



Purple Spurge



Dwarf Spurge



Petty Spurge



Small Spurge

DIVISION I. BRITISH SPECIES.

1. Wood Spurge.

Tithymalus characias amygdaloides.

The root is compoſed of a multitude of large fibres, which ſpread every way.

The ſtalks are numerous and firm: they are thick, upright, and round, and have a rediſh bark, and under that a green one: they are a yard high, and not branched, except where they ſpread at the top for flowering.

The leaves are large and numerous: they are long, narrow, and ſoft to the touch: they are of a deep green, and a little hairy at the upper ſide; and of a greyiſh green, and more hairy underneath; and their middle rib is red toward the baſe.

The flowers are greeniſh, ſmall, and very numerous: they ſtand at the top of the ſtalks on ſmall, divided branches, which ſpread in a kind of umbel, and which have, at their inſertions and diviſions, ſhorter leaves than thoſe on the ſtalk: the figure, and diſpoſition of the petals of the flower, form numerous creſcents; ſo that the whole top in flower has a beautiful appearance.

The whole plant is full of a cauſtick, milky juice.

It is frequent in woods and on heaths, and flowers in June.

C. Bauhine calls it *Tithymalus characias amygdaloides*; and almoſt all who have written ſince have copied him.

2. Red French Spurge.

Tithymalus characias rubeſcens.

The root is long, thick, and divided into ſeveral parts, and furniſhed with many fibres.

The ſtalk is round, firm, red, upright, and three feet high.

The leaves are long, narrow, and ſharp-pointed: they have ſhort footſtalks, and are ſmooth, of a dead green at firſt, but afterwards red: they are of a hard, firm ſubſtance, and differ as much in that as colour from thoſe of the preceding ſpecies.

Toward the top the ſtalk divides into a vaſt number of branches, on which ſtand the flowers in a great umbel: they are ſmall, very numerous, and of ſo deep a purple that they appear black.

The ſeed-veſſel is very large: the whole plant, when it has ſtood ſome time, becomes red.

It is common in France and Germany, and is of late found to be a native of our country. Dr. Plot mentions its being found wild in Staffordſhire; and Mr. Ray takes notice of the place, though he ſuſpected it to ariſe from ſeeds ſcattered from a garden: it has ſince been found on the mountains in the north of Ireland.

It flowers in May.

C. Bauhine calls it *Tithymalus characias rubens peregrinus*. The generality of later authors call it *Tithymalus characias Monſpelienſium*, from its frequency about that place.

3. Rough-fruited Spurge.

Tithymalus verrucoſus.

The root is compoſed of a ſmall head, and a numerous tuft of fibres.

The ſtalk is round, ſlender, upright, not at all branched, and a foot high.

The leaves ſtand irregularly, and are broad, ſhort, ſharp-pointed, ſmooth, of a pale green, and not at all indented at the edges.

The flowers ſtand in a ſmall tuft, or umbel, at the top of the plant; and they are little, and of a yellowiſh green.

The ſeed veſſel is roundiſh, large, and rough: it is more conſpicuous than in moſt of the other kinds, and has been ſuppoſed to reſemble a wart: the ſeeds are large.

It is found in the northern counties, but is not common.

C. Bauhine calls it *Tithymalus myrſinites fructu verrucæ ſimili.*

4. Sea Spurge.

Tithymalus maritimus.

The root is very long, and furniſhed with a few fibres.

The ſtalks are numerous, thick, round, and a foot and half high: they are perfectly covered with the leaves; ſo that the plant makes a very ſingular appearance.

The leaves are oblong, narrow, undivided at the edges, and pointed at the ends: they ſtand upwards, and are placed, in the manner of ſcales, one over another.

The flowers ſtand in a ſmall umbel at the top of the plant, and are little and greeniſh.

The ſeed-veſſel is large, and the ſeeds are alſo large.

The whole plant is perfectly ſmooth, and of a bluiſh green colour.

It is common on our ſea-coaſts, and flowers in June.

C. Bauhine calls it *Tithymalus maritimus*. J. Bauhine, *Tithymalus paralius*; and moſt of the ſucceeding authors have taken one or other of theſe names.

5. Knobby-rooted Spurge.

Tithymalus radice craſſa.

The root is large, thick, and tuberous; of a browniſh colour, with a tinct of red on the outſide, and full of a milky juice.

The ſtalks are numerous, weak, round, of a pale green, and a foot high.

The leaves are ſhort, very numerous, and of a pale green: they are not at all indented, and they terminate in a rounded end.

The flowers are ſmall and yellowiſh, and form a kind of umbel at the tops of the branches.

The ſeed-veſſel is large, as are alſo the ſeeds.

It is frequent in the cornfields of Ireland; and flowers in Auguſt.

Merret calls it *Tithymalus Hibernicus.*

6. Broad leaved Spurge.

Tithymalus latifolius arvenſis.

The root is long, ſlender, and has a few fibres.

The ſtalk is ſingle, round, upright, firm, and a foot and half high.

The leaves are oblong and broad, perfectly ſmooth, not at all indented at the edges, and of a pale green.

The flowers ſtand in a large cluſter at the top of the ſtalk, and are ſmall and green.

The ſeed veſſel is large, as are alſo the ſeeds.

It is found among corn in our ſouthern counties; and flowers in July.

C. Bauhine calls it *Tithymalus arvenſis latifolius Germanicus.* J. Bauhine, *Tithymalus platyphyllos fuchſii.* Cluſius, *Tithymalus peregrinus platyphyllos.*

7. Small long-leaved Spurge.

Tithymalus parvus longifolius.

This is an upright, pretty plant.

The root is ſmall and ſlender, and has but few fibres.

The ſtalks are numerous, firm, upright, and of a rediſh hue near the ground, but of a pale green higher up.

The leaves are long, narrow, and of a yellow green: they have no footſtalks, and they are perfectly undivided at the edges.

The flowers ſtand in a looſe kind of umbel at the tops of the ſtalks, and on ſmall branches riſing from the boſoms of the upper leaves: they are ſmall and yellow.

The ſeed-veſſel is ſmall, and the ſeeds are brown.

It is common in the corn-fields of Kent and ſome other parts of the kingdom; and flowers in July.

Ray calls it *Tithymalus ſegetum longifolius.*

8. Little Sea Spurge.

Tithymalus maritimus parvus.

The root is long, and furniſhed with many fibres.

The ſtalk is round, ſingle, upright, and about eight inches high.

The leaves are numerous, ſmaller at the bottom, and larger all the way up the ſtalk: they have no footſtalks, and hang downwards: they are ſhort, and of an inverted oval figure; broadeſt at the end, and ſmaller all the way to the baſe: they are of a whitiſh green colour, undivided at the edges, and round at the end, with a weak prickle.

The flowers are numerous, and ſtand in a looſe ſcattered umbel: they are ſmall and yellow.

The ſeed-veſſels are large, and ſomewhat rough.

It is found on our ſea-coaſts; and flowers in June.

Ray calls it *Tithymalus maritimus minor Portlandicus.* It was firſt found by Mr. Stoneſtreet near Portland toward Devonſhire.

9. Dwarf Spurge.

Tithymalus pumilus anguſtifolius.

The root is ſmall, oblong, and undivided, and has a few fibres.

The ſtalks are numerous, weak, round, and of a yellowiſh colour: they lie ſpread every way upon the ground, and are branched, full of leaves, and uſually four or five inches high, ſometimes more, often much leſs.

The leaves are ſmall, oblong, pointed at the ends, and of a pale green.

The flowers ſtand in a kind of ſcattered umbels at the tops of the ſtalks; and at the baſe of theſe there are longer and narrower leaves than the others: the flowers themſelves are very ſmall, and yellow.

The ſeed-veſſels are alſo ſmall.

It is common in our cornfields, and flowers in Auguſt.

C. Bauhine calls it *Tithymalus ſive eſula exigua.* Others, *Tithymalus minimus.*

10. Sun Spurge.

Tithymalus helioſcopius.

The root is long, ſlender, and furniſhed with a few ſhort fibres.

The ſtalk is round, upright, ſingle, not at all branched, and ten inches high.

The leaves are numerous, oblong, of an inverted oval figure, and ſerrated at the edges: they have no footſtalk; and are ſmalleſt at the baſe, whence they are broader all the way to the end.

The flowers ſtand at the top of the ſtalk, in a broad, ſpreading umbel: they are of a yellowiſh green.

The ſeed-veſſels are large, and the ſeeds are alſo large.

It is common on garden borders and in other cultivated grounds; and flowers in July.

C. Bauhine calls it *Tithymalus helioſcopius.* J. Bauhine, *Tithymalus ſoliſequius.*

11. Little, roundiſh-leaved Spurge.

Tithymalus parvus foliis ſubrotundis.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalks are round, upright, of a pale green, and eight inches high.

The leaves are ſhort, roundiſh, on the lower part of the ſtalks, and ſomewhat longer on the upper part, where they reſemble thoſe of the *ſun ſpurge*, but that they are ſmaller, and not dented at the edges: they are of a pale green, and have no footſtalks.

The flowers ſtand at the tops of the ſtalks in a kind of looſe umbels: they are ſmall, and of a yellowiſh green.

It is common in garden borders, and other cultivated ground; and flowers in May.

This and the preceding are the two moſt common kinds we have: they generally grow together, and are diſtinguiſhed at ſight by the leaves being dented in one, and not in the other: this laſt alſo is the ſmaller.

C. Bau.

C. Bauhine calls it *Peplus, ſive Eſula rotunda.* Ray, *Tithymalus parvus annuus foliis ſubrotundis non crenatis.*

12. Branched Sea-Spurge:

Tithymalus maritimus ramoſus.

This is a ſingular ſpecies.

The root is long, ſlender, and undivided.

The ſtalk is round, weak, ſix or eight inches high, and very much branched: a great part of the branches uſually lie upon the ground, but the main part of the ſtalk riſes tolerably upright.

The leaves are ſmall, broad, ſhort, numerous, and of a yellowiſh green at firſt; but, when the plant has ſtood ſome time, they are uſually rediſh: they are broad at the baſe, where they adhere without any footſtalk, and are obtuſe at the end.

The flowers are ſmall and yellowiſh at firſt, but afterward they are rediſh: they do not grow, as in the others, only at the top of the ſtalks, but all along the plant, riſing with ſhort foot-ſtalks from the boſoms of the leaves.

The ſeed-veſſels are large, and marked with three diviſions, and the ſeeds are large and brown.

It is frequent on our ſea-coaſts, and flowers in May.

C. Bauhine calls it *Tithymalus maritimus folio obtuſo.* Others, *Peplis.*

When in flower, it is uſually throughout of a ſcarlet-colour.

DIVISION II. FOREIGN SPECIES.

1. Tree-Spurge.

Tithymalus arboreus.

The root is large, and ſpreading.

The ſtem is thick, firm, and erect; and the whole plant has very much the appearance of a tree.

It grows to five feet in height: the trunk is naked; and from its top, which is nearly at half the height of the entire plant, riſe numerous branches: theſe are ſlender, upright, and of a rediſh colour.

The leaves are oblong, narrow, and of a pale green, not at all divided at the edges, ſharp at the point, and without footſtalks.

The flowers ſtand at the tops of theſe in ſmall umbels, and are little and yellow.

The ſeed-veſſels are large, and the ſeeds brown.

It is a native of Italy, and of the Greek iſlands, and flowers in July.

C. Bauhine calls it *Tithymalus myrtifolius arboreus.* Others, *Tithymalus arboreus.*

2. Myrtle-Spurge.

Tithymalus myrſinites.

The root is long, divided, and furniſhed with many fibres.

The ſtalks are round, thick, and green, or ſometimes rediſh, and lie in great part upon the ground: the flowering branches riſe to eight inches high, and make a very pretty appearance: they are ſlender, upright, and not at all divided or branched.

The leaves are very numerous, thick, and of a bluiſh green: they have no footſtalks, and they reſemble the leaves of myrtle: they hang downwards, and they are rough at the edges, and pointed at the end.

The flowers are ſmall and green; but they ſtand in a large, regular, and beautiful umbel at the tops of the ſtalks.

The ſeed-veſſel is large, and deeply marked in three places.

It is a native of Italy, and the ſouth of France, and flowers in July.

C. Bauhine calls it *Tithymalus myrſinites latifolius.* Others ſimply *Tithymalus myrſinites.*

2. Round-rooted Spurge.

Tithymalus radice rotunda.

The root is large, and of a regular figure; approaching to round, but reſembling the ſhape of a pear.

The ſtalks are numerous, round, thick, and uſually rediſh: they are five or ſix inches high, and ſeldom perfectly erect, but leaning or bending one way or other.

The leaves are broad, ſhort, and not very numerous: they have no footſtalks, and they are ſmalleſt at the baſe, and larger all the way to the other end.

The flowers are ſmall, and green, with a tinge of yellow: they ſtand in large umbels on the tops of the ſtalks.

The ſeed-veſſel is large, and marked with three diviſions, and the ſeeds are large.

It is a native of Crete, and flowers in Auguſt.

C. Bauhine calls it *Tithymalus tuberoſa pyriformi radice.* Others, *Apios.*

4. Pine-Spurge.

Tithymalus foliis anguſtis acutis:

The root is long, ſlender, and covered with a rediſh bark.

The ſtalk is round, firm, upright, and a foot and a half high.

The leaves ſtand irregularly, and are large, narrow, and pointed at the end: they are of a bright green colour, and ſoft to the touch.

The flowers are ſmall and greeniſh: they ſtand in a large umbel at the top of the ſtalk.

The ſeed-veſſel is large, and the ſeeds are large and brown.

It is common among the wet rocks in France, Spain, and Italy, and flowers in Auguſt.

C. Bauhine calls it *Tithymalus foliis pini ſorte Dioſcoridis pithyuſa.* Others, *Pithyuſa.*

5. Great-fruited Spurge.

Tithymalus fructu magno.

The root is large and ſpreading.

The ſtalk is round, thick, hollow, whitiſh, and tinged, as it were, with brown: it is upright,

right, and, like all the other ſpurges, full of a milky juice.

The leaves are numerous, long, narrow, and of a pale green: they have no footſtalks; they adhere by a narrow baſe, and ſtand out horizontally.

The top divides into ſeveral branches, forming a very large umbel; and the plant, when in flower, is a yard high.

Theſe upper branches have numerous leaves; but they are unlike the others: they are broad at the baſe, and ſmaller to the point; ſo that they are in ſome degree of a triangular form.

The flowers are large and yellowiſh, and the ſeed-veſſels very large, and deeply ribbed.

When they are fully ripe, they burſt in the hot ſun, and the ſeeds fly out forcibly.

It is a native of France and Italy. We keep it frequently in gardens. It flowers in July.

C. Bauhine calls it *Lathyris major*. Others call it *Cataputia major*. Others only *Lathyris* and *Cataputia*, without the addition of *major*.

The reaſon of calling this the *greater cataputia* is, that ſome have deſcribed what they call a ſmaller ſpecies; but that differing, according to their own accounts, in nothing but ſize, is a variety, and not a diſtinct ſpecies.

6. Great Myrtle-Spurge.

Tithymalus myrtifolius perennis.

The root is thick, divided, and perennial.

The ſtalks are numerous, round, hollow, thick, and two feet high: they are perfectly erect, and not at all branched.

The leaves are large, oblong, and ſharp-pointed, of a blackiſh green, and drooping.

The flowers are large, and of a greeniſh yellow: they ſtand in ſmall umbels.

The ſeed-veſſel is large, and the ſeeds are blackiſh.

It is a native of Germany, and flowers in Auguſt.

C. Bauhine calls it *Tithymalus myrſinites anguſtifolius*. Others, *Tithymalus myrtifolius niger*.

All the ſpecies of *tithymal*, Engliſh and foreign, agree in their qualities. They abound with a hot and acrid juice, which applied outwardly eats away warts, and other excreſcences. The bark of the root of the *eſula*, and ſome other kinds, have been at different times received in the ſhops as medicines; but they are now altogether diſuſed.

Their operation was by vomit and ſtool; and they did both ſo violently, that it is with great reaſon they are baniſhed the ſhops.

Some country-people have ventured to take ſmall doſes of the juice of *ſpurge*: it operates violently, and is apt to erode and inflame the inteſtines. If any will venture to give the *eſula* bark, it ſhould be corrected, by ſteeping in vinegar, and afterwards dried and powdered; and mace, and a few grains of gum tragacanth, mixed with it.

GENUS VI.

PLANTAIN.

PLANTAGO.

THE flower conſiſts of four petals, joined at the baſe: the cup is formed of a ſingle leaf, divided into four parts, and remains with the fruit: the ſeed-veſſel is of an oval form, and the ſeeds are numerous and ſmall.

Linnæus places this among the *tetrandria monogynia*; the threads in each flower being four, and the ſtyle from the rudiment of the capſule ſingle.

This author joins under the ſame name ſome other genera, as they are called by too many, and with one exception, very juſtly. They erred who made a peculiar genus of the *coronopus* or *buckshorn plantain*; but Linnæus is as much in the wrong, when, on the other ſide, he brings in the *pſyllium*, or *fleawort*, into the ſame genus. We ſhall ſhew the diſtinction when treating of *pſyllium* in the ſucceeding part of this claſs; there being no ſpecies of it Britiſh. We ſee in this, as in many other inſtances, how natural it is in avoiding an error on one ſide, to commit one on the other. The mark of prudence is to keep the moderate courſe, and to know where to ſtop.

DIVISION I. BRITISH SPECIES.

1. Smooth, broad-leaved Plantain.

Plantago latifolia glabra.

The root conſiſts of numerous, thick fibres, joined to a ſmall head.

The leaves riſe in a great cluſter; and are large, broad, and of a dead green: they are of an oval figure, broadeſt at the baſe, ſmaller to the end, where they terminate obtuſely; and they have long, hollow footſtalks.

The ribs are very large and conſpicuous, and they run lengthwiſe of the leaves: there are uſually ſeven of them.

The ſtalks riſe among theſe, and are numerous, round, tough, and a foot high.

They have no leaves on them; but at the tops bear a long, ſlender ſpike of flowers.

The flowers are ſmall and inconſiderable: they are of a greeniſh white, and ſoon fade.

The ſeed-veſſel is ſmall and oval, and the ſeeds are numerous and brown.

C. Bauhine calls it *Plantago latifolia ſinuata*. Others, *Plantago latifolia vulgaris*. We in Engliſh, *Great plantain*, or *Waybred*.

The leaves are uſually ſmooth, and ſometimes lightly

lightly ſinuated, often waved, and otherwiſe irregular.

There are alſo other varieties of this plant, which have been deſcribed and figured as particular ſpecies. What is called *roſe-plantain*, is this ſpecies with cluſters of ſmall leaves growing on the ſtalk in form of a roſe, and is owing to the puncture of an inſect, which perverts the courſe of the juice. The ſeveral other varieties of it, and of the other ſpecies, as the *beſom plantain*, and the reſt, are only varieties, riſing from the ſame accident.

2. Rough, broad-leaved Plantain.

Plantago latifolia hirſuta.

The root is compoſed of numerous, large fibres.

The leaves riſe in a thick tuft; and are broad, large, and of a whitiſh colour: they are of an oval ſhape, broadeſt near the baſe, growing gradually ſmaller to the end; and their ribs run lengthwiſe, and are very conſpicuous.

The ſtalks riſe among the leaves in conſiderable number: they are a foot high, of a whitiſh colour, hairy, and not very firm.

The flowers are ſmall and whitiſh, and they ſtand at the tops of the ſtalks in ſhort and thick ſpikes, not in long, ſlender ones, as in the former kind.

It is common in paſtures, and flowers in May.

C. Bauhine calls it *Plantago latifolia incana.* Others, *Plantago major incana.* We, *Hoary plantain*, or *Lambs tongue.*

3. Narrow-leaved Plantain.

Plantago anguſtifolia vulgaris.

The root is thick, ſhort, divided into ſeveral parts, and furniſhed with many fibres.

The leaves are numerous, and have no footſtalks: they are long, narrow, and of a deep green, broadeſt toward the middle, and ſharp at the point.

Their ribs run lengthwiſe, as in the others, and are very large and conſpicuous.

The ſtalks are numerous, tough, upright, naked, ſtriated, and ten inches high.

The flowers are ſmall, and ſtand at the top of each ſtalk in a ſhort, thick ſpike.

The ſeed-veſſels are ſmall and oval, and the ſeeds very minute and brown.

It is common every where by way-ſides, and flowers all ſummer.

C. Bauhine calls it *Plantago major anguſtifolia.* Others, *Plantago quinquenervia.* We, *Ribwort plantain.*

It varies extremely in ſize, according to the degree of nouriſhment it receives; and hence the common writers have deſcribed a larger and ſmaller kind; but this is only variation from accident, no diſtinction of ſpecies.

This is alſo liable to the ſame accidental variations as the broad-leaved kind, from the diſturbed current of the juice; and by this its top will be covered with leaves, or its ſpike variouſly altered.

Theſe are no more than varieties perfectly accidental; but as they are ſingular in their kind, they are repreſented in the annexed plate.

4 Little, annual, broad-leaved Plantain.

Plantago latifolia annua parva.

The root conſiſts of a few fibres.

The leaves are numerous, and ſpread upon the ground: they are broad and ſhort; they approach to an oval figure, and have very high veins: they are ſinuated at the edge, but lightly and irregularly, and terminate in a ſharp point.

The ſtalks are numerous, round, firm, and about three inches high: they have no leaves on them, and are of a pale green.

The flowers ſtand in long and ſlender ſpikes at the top of each ſtalk.

The ſeed-veſſels are large, and the ſeeds very ſmall.

It is not uncommon in damp places on heaths; where it is generally overlooked, being conſidered only as a ſtarved plant of the common kind, or as an accidental variety; but it is truly diſtinct.

C. Bauhine calls it *Plantago latifolia glabra minor*; and moſt others deſcribe it under the name of *Plantago minor*; but they confound with this, which is entirely diſtinct, the accidental variety of the *common plantain*, when only ſmaller from want of nouriſhment.

Difference in ſize alone is no mark of a diſtinct ſpecies; but, joined with others, it aſſiſts.

Authors deſcribe alſo a kind of *hoary plantain*, under the name of the *ſmaller*. Plukenet calls it *Plantago noſtras latifolia minor incana trinervis*; but this is nothing more than an accidental variety of the *common hoary plantain*, all the parts being the ſame, though ſmaller, and the plant riſing to its full ſtation in better ground.

5. Sea-Plantain.

Plantago marina.

The root is long, ſlender, undivided, and furniſhed with a few fibres.

The leaves are numerous, long, and narrow; they riſe in a thick tuft, and ſtand tolerably upright, only a few of the outermoſt lying upon the ground. They have no footſtalks: they are broadeſt at the baſe, narrower all the way to the point, and ſometimes a little notched at the edges, but this very irregularly.

The ſtalks riſe among theſe leaves in great number: they are four or five inches high, and have at their top a ſpike of flowers very ſlender, and three or four inches in length; ſo that the whole height is eight or ten inches: the ſtalks are naked, and the flowers in the ſpikes are very ſmall.

The ſeed-veſſels alſo are ſmall, and oval; and the ſeeds very minute.

It is common in our ſalt-marſhes, and elſewhere about the ſea-coaſts, and flowers in June.

C. Bauhine calls it *Plantago maritima major.* Others, *Plantago marina vulgaris*, and *Coronopus marinus.* We, *Sea plantain*, or *Sea bucks-horn plantain.*

6. Bucks-horn Plantain.

Plantago foliis inciſis.

The root is long, ſlender, undivided, and furniſhed with many fibres.

The leaves are numerous, and very beautiful: they lie upon the ground, and ſpread themſelves out every way from the head of the root, in form of a ſtar: they are long, narrow, and deeply jagged at the edges; the jaggs are ſo long that they have been ſuppoſed to give the leaf ſome reſemblance of the horn of a buck; whence its Engliſh name: they are of a pale green, and hairy.

The ſtalks are numerous, round, ſlender, and naked.

The flowers are ſmall, but have conſpicuous white buttons from their centre.

The ſeed-veſſel is ſmall and oval, and the ſeed is very minute.

The flowers and ſeed-veſſels ſtand in ſhort, ſlender ſpikes.

It is common in barren places, and flowers in July.

C. Bauhine calls it *Coronopus ſylveſtris birſutior.* Others, *Coronopus*, and *Cornu cervinum*, or *Plantago coronopus dicta.* We, in Engliſh, *Bucks-horn plantain*, and in ſome places *Star of the earth:* but this laſt is an improper name, becauſe it has been alſo given to a very different plant, to be deſcribed hereafter, and therefore will create confuſion.

7. Little hairy Plantain.

Plantago angustifolia pumila incana.

The root is large, irregular, oblong, and of a brown colour.

The leaves are few, and ſmall: they riſe in a little tuft, and are tolerably upright: they have no footſtalks: they are hairy, and of a pale green, and are broadeſt in the middle, and narrower to the point, where they terminate ſharply.

The ſtalk is round, weak, naked, upright, and four inches high.

The flowers are ſmall and white: they ſtand in a thick, ſhort tuft at the top of the ſtalk, and quickly fade.

The ſeed-veſſels are oval, ſmall, and ſmooth, and the ſeeds are very ſmall and blackiſh.

It is frequent about the ſea-coaſt of Suſſex, and flowers in April.

Ray calls it *Plantago angustifolia minor.*

This little plant is ſubject, like the others, to the variations of having a divided ſpike, or a leafy top; and they ariſe altogether from the ſame cauſe, the bitings of inſects. This is an accident that we ſee produce ſtrange appearances in many plants, from the oak to this meaneſt of the *plantain* kind.

The various excreſcences of the oak, the galls, oak-apples, and the like, are cauſed only by the puncture of a fly. The roſe upon the willow, which is juſt analogous to this upon the *plantain*, is alſo owing to the ſame cauſe; and ſo are innumerable others.

8. Narrow-leaved mountain Plantain.

Plantago Alpina angustifolia.

The root is long, ſlender, and furniſhed with a few fibres.

The leaves riſe from numerous heads, into which the root ſplits at the crown; and are long, narrow, and of a pale green: they have no footſtalks: they are broadeſt in the middle, and ſmall both at the baſe and point, where they terminate ſharply.

The ſtalks are few, and very ſmall: they are not more than three inches high, round, ſlender, and green.

The flowers are ſmall, and of a greeniſh white: they ſtand at the tops of the ſtalks in a ſmall, ſlender ſpike.

The ſeed-veſſels are oval, and the ſeeds very ſmall.

It is common on the Welch mountains, and flowers in April.

C. Bauhine calls it *Plantago Alpina angustifolia.*

9. Hairy graſſy-leaved Plantain.

Plantago foliis gramineis hirsutis.

The root is long, ſlender, white, and furniſhed with a few threads.

The leaves riſe in a conſiderable tuft; and are ſmall, of a greyiſh green, and graſſy: they are broadeſt at the baſe, narrower all the way to the point, and hairy.

The ſtalks are weak, round, and naked, and ſupport little ſpikes of flowers.

The flowers themſelves are very ſmall and whitiſh, and the ſpikes thick, ſhort, and roundiſh.

The ſeed-veſſel is roundiſh, and the ſeeds are ſmall.

It is common on the iſland of Sheepey, and in other parts about the ſea-coaſts. It flowers in June.

Ray calls it *Plantago gramineo folio hirsuto minor capitulo rotundiore brevi.*

10. Single-flowered Plantain.

Plantago monanthes.

The root is compoſed of a great number of fibres, which penetrate deep into the ground.

The leaves riſe in a large tuft; and they are narrow, long, and graſſy; many lie on the ground, and a good number ſtand up.

Among theſe riſe the ſtalks: they are very minute, ſlender, brown, and naked: they are not half an inch high; each ſuſtains a ſingle flower, which is very ſmall and inconſiderable; and from this riſe four very long ſtamina, with large, white buttons

The ſeed-veſſel is ſmall and oval, and the ſeeds are very minute.

It is not uncommon in boggy places, though, from its ſmallneſs, little regarded. It flowers in June.

This little plant has a variety of long names. Tournefort calls it *Plantago paluſtris gramineo folio monanthos Pariſienſis.* Ray, *Gramen junceum, ſive holoſteum minimum paluſtre capitulis quatuor longiſſimis ſtaminibus donatis.*

DIVISION II. FOREIGN SPECIES.

1. Thick ſpiked Sea-Plantain.

Plantago maritima ſpicis craſſis.

The root is long and ſlender, and is furniſhed with a few fibres.

The leaves are narrow, hairy, and ſhort, in compariſon of many of the former kinds: they are ſmall near the baſe, broadeſt toward the end, and ſharp-pointed.

The ſtalks are numerous, round, ſlender, and hairy: they are four or five inches high, and have leaves on them.

The flowers are placed at the tops of the ſtalks in a thick ſpike.

The ſeed veſſel is large and oval, and the ſeeds are very ſmall.

It is common on the ſea-coaſts of Spain, and flowers in May.

C. Bauhine calls it *Holoſteum hirſutum albicans majus*. Others, *Plantago Hiſpanica ſpica oblonga*.

It is ſometimes found very ſmall for want of nouriſhment, and in that ſtate has been deſcribed as a diſtinct ſpecies; but it is merely an accidental variety.

2. Short-ſtalked Plantain.

Plantago ſcapo brevi.

The root is long, ſlender, and undivided.

The leaves are numerous, of a greyiſh green, narrow, and of a graſſy ſhape: they are broadeſt at the baſe, and ſmaller all the way to the point.

The ſtalks are numerous, and very ſhort: they are not of the length of the leaves, and are of the ſame greyiſh colour, and covered with a thick downy hairineſs.

The flowers are ſmall and whitiſh: they are placed in thick, ſhort ſpikes at the tops of theſe ſtalks, and ſeldom ſtand upright, uſually drooping one way or other.

The ſeed-veſſel is large and oval, and the ſeeds are very ſmall.

It is common in the Greek iſlands, and flowers in June.

C. Bauhine calls it *Holoſteum, ſive Leontopodium Creticum*. Cluſius, *Leontopodium Creticum*.

3 Narroweſt-leaved Plantain.

Plantago foliis anguſtiſſimis.

The root is very thick, and divided.

The leaves are extremely numerous, and narrower than any other of the *plantain* kind: they are long, and lie every way ſpread about, and frequently are curled, ſo that they reſemble worms, or little ſerpents; whence the plant has been named *ſnake-graſs*.

The ſtalks are round, weak, and ſlender: they have no leaves on them.

The flowers ſtand at the tops in long, ſlender ſpikes, and they are ſmall and inconſiderable.

The ſeed-veſſel is oval and ſmall, the ſeeds are minute and numerous.

It is a native of Italy, and flowers in Auguſt.

C. Bauhine calls it *Holoſteum ſtrictiſſimo folio majus*. Others, *Plantago ſtrictiſſimo folio*, and *Serpentaria major*.

All the ſpecies of *plantain* poſſeſs the ſame virtues, and they are very conſiderable. None of them is better than the common broad-leaved kind; therefore with us it would be idle to bring any other into uſe.

This is aſtringent, cooling, and healing.

A water is diſtilled from it; but this is of ſmall value, for theſe are not virtues that riſe in diſtillation.

A decoction of the entire plant is excellent in diſorders of the ureters.

The root, dryed and powdered, is to be given half a dram for a doſe, and is very ſerviceable againſt looſeneſſes with ſharp and bloody ſtools.

The juice is good againſt ſpitting of blood, and againſt the overflowings of the menſes.

The leaves, bruiſed, and uſed outwardly, cleanſe and heal old ulcers.

Theſe are all the plants with four petals to the flower, and a ſingle regular capſule, of which there are any ſpecies native of Britain. It muſt not appear an omiſſion, that three plants, aſcribed in Mr. Ray's Synopſis to this claſs, are omitted. The firſt, *pentapterophyllon*, has no ſeed-veſſel, but the flower is followed by four naked ſeeds; the ſecond, *balſamine*, has five petals to the flower; and the third, *hypopitys*, has ten. By what overſight in Mr. Ray theſe came to be added to the preſent claſs, I ſhall not enquire: it is plain they ſeverally belong to three others; and they will be treated of accordingly in their places in the ſucceeding part of this work.

SERIES II.

Thoſe of which there is no ſpecies native of this country.

GENUS I.

RUE.

RUTA.

THE flower is compoſed of four petals, which are hollow, narrow, and ſtand open, and it has a tuft of threads in the centre: the cup is ſmall, formed of a ſingle piece, but divided into four ſegments at the edge, and permanent: the ſeed-veſſel is large and ſingle, but compoſed of four lobes, and lightly divided into four partitions: the ſeeds are numerous and rough.

Linnæus places this among the *octandria monogynia*; the threads in each flower being eight, and the rudiment of the capſule with its ſtyle ſingle.

There is ſometimes a variation in the uppermoſt flower of *rue*, it having five inſtead of four petals; but in that caſe all the reſt of the flowers, wherever ſo numerous, conſiſt only of four each: in the caſe of five petals, there are alſo found ten inſtead of eight threads in the flower.

This ſhews the uncertainty of any one part, much more of any ſmall part of a plant, to fix a generical character. When it happens that even there is a petal too much in the flower, ſtill the ſeed-veſſel ſhews a difference from all other plants, and is conſiſtent and uniform: this therefore is an eſſential part in a generical character.

1. Common Rue.

Ruta ſylveſtris.

The root is long and large, divided into many parts, and furniſhed with numerous fibres.

The ſtalk is round, and, when the plant has ſtood ſome time, it grows hard and woody, and is covered with a greyiſh bark. At firſt it is tender and green, and the branches and young ſhoots continue of that texture and colour: it riſes to two or three feet high, ſometimes more, and is very much branched.

The leaves are very numerous, of a bluiſh colour, thick, and of a fleſhy ſubſtance: they are, properly ſpeaking, doubly pinnated, ſeveral pairs of pinnated leaves growing on a middle rib, and each of theſe being compoſed of four or five pair of ſmall ones on its rib, with an odd leaf at the end; but they are ſo numerous, that this diſpoſition is not much regarded: theſe ſeparate leaves are ſhort, broad, and obtuſe.

The flowers ſtand at the tops of the branches in large tufts, and are ſmall, and of a bright yellow.

The ſeed-veſſel is large, and ſeems as if compoſed of four parts, and the ſeeds are rough.

It is a native of the ſouthern parts of Europe, and flowers in Auguſt.

C. Bauhine calls it *Ruta hortenſis latifolia*. Others, *Ruta major latifolia*. And we, *Common rue*, and *Garden rue*.

Rue is a plant of a very ſtrong taſte and ſmell, and of very powerful qualities. Rubbed upon the ſkin, it raiſes an inflammation, and is uſed by ſome in this manner againſt headachs.

They diſtil a water from it in the ſhops, which has little virtue, for the qualities of *rue* are not of that kind which riſe in diſtillation.

There is no better way of giving it than in a conſerve made of the freſh tops, beaten up with ſugar. In this form it is excellent againſt hyſterick complaints ariſing from ſuppreſſions of the menſes; and taken for a continuance againſt the epilepſy.

The juice of *rue*, expreſſed with white wine, and taken in very ſmall doſes, is a remedy for that troubleſome diſeaſe the nightmare.

An infuſion of it taken for a continuance of time, is greatly recommended alſo againſt diſorders of the eyes.

The antients had an opinion of *rue* as a preſerver of chaſtity, or a preventer of lewd thoughts; but we give no medicines for diſorders of the mind.

C. Bauhine deſcribes another kind of *rue*, under the name of *Ruta hortenſis altera*; but it is only a variety, not a diſtinct ſpecies: hence Linnæus, carrying the thought too far, has been led to conſider moſt of the other kinds deſcribed by authors to be alſo varieties: we ſhall ſhew by their figures and deſcriptions that they are ſufficiently diſtinct.

The true botaniſt ſhould be as careful to preſerve the really ſeparate ſpecies of plants under their preſent names, as to explode from that number thoſe which have been called ſo, but are only varieties. Moſt have been too laviſh on this head; Linnæus is too confined. The ſpecies of plants, according to the generality of authors, taking all they have ſuppoſed to be diſtinct, amount to about ſixteen thouſand three hundred. Linnæus would reduce them to leſs than ten thouſand; but a moderate computation will eſtabliſh them at about twelve thouſand four hundred. This is the neareſt account of the number of known plants.

2. Sharp-leaved Rue.

Ruta foliis acuminatis.

The root is long, thick, divided, and furniſhed with numerous fibres.

Sea Spurge

Myrtle Spurge

Round Rooted Spurge

Pine Spurge

Great Round Spurge

Great Myrtle Spurge

Smooth Broad leaved Plantain

Rough Broadleaved Plantain

Ribwort Plantain

Sea Plantain

Bucks horn Plantain

Broad leaved Rose Plantain

Bifom Plantain

Narrow Spiked Narrow leaved Plantain

Small Hairy Ribwort Plantain

Single flowered Plantain

Short Stalked Plantain

Narrow leaved Rose Plantain

Narrow leaved Mountain Plantain

Thick Spiked Sea Plantain

Long Narrower leaved Plantain

The ſtem is thick, round, and firm, and, when old, is covered with a pale brown bark; but the young ſhoots and twigs are tender and green.

The leaves are numerous, and are of the doubly-pinnated kind, each compoſed of two or three pairs on a rib, and each of theſe of ſeveral pairs of ſeparate leaves joined to their rib, with an odd one at the end.

The whole plant thus far reſembles *common rue*, and is like it ſhrubby, and three feet high, and very much branched.

The ſeparate leaves ſhew a manifeſt difference: they are in the *common rue* ſhort, and roundiſh or blunt; in this ſpecies they are oblong, narrow, and ſharp-pointed: their colour is a greyiſh green, and they are not ſo fleſhy as in the *common rue*.

The flowers ſtand at the tops of the branches, and are large and yellow.

The ſeed-veſſel is large, and four-cornered, and the ſeeds are large and rough.

It is a native of the Eaſt, and flowers in July.

C. Bauhine calls it *Ruta ſylveſtris major*. Dodonæus, *Ruta gravcolens*.

3. Little five-leaved Rue.

Ruta pumila tennifolia.

The root is long, thick, divided, and furniſhed with numerous fibres.

The firſt leaves riſe ſeparate from the ſtalk, and lie upon the ground: they are pinnated in a ſingular manner; each is compoſed of three or four pairs of pinnæ, with an odd one at the end, ſet on a ſlender, naked rib; but theſe pinnæ are not compoſed of ſmaller leaves, as in the ſpecies before deſcribed, but are deeply and irregularly divided in a pinnated form, into long, narrow ſegments; ſo that the whole large leaf has a very beautiful appearance.

The ſtalks are numerous, weak, and tough: they are a foot and a half high, and have leaves placed irregularly on them, reſembling thoſe from the root, and of a pale green.

The flowers ſtand in tufts at the tops of the ſtalks, and are ſmall and yellow.

It is a native of Italy, and flowers in June.

C. Bauhine calls it *Ruta ſylveſtris minor*. The plant called in Latin *harmala*, and by many *wild rue*, is of another genus, to be deſcribed hereafter.

GENUS II.

EUPHORBIUM.

THE flower conſiſts of four petals: the cup is divided into four ſegments, and theſe are placed alternately between each other: the ſeed-veſſel is roundiſh, but marked with three diviſions, and contains three cells, in each of which there is a ſingle ſeed: the body of the plant is thick, fleſhy, and angulated.

Linnæus places this among the *polyandria monogynia*; the filaments being numerous, and growing to the receptacle, and the ſtyle from the rudiment of the fruit ſingle.

He joins under this name, as we have ſhewn before, the *common tithymals* or *ſpurges*: it is true, that the flowers and ſeed-veſſels agree; but there is enough in the ſtructure of the plants to warrant a diſtinction.

1. Common Euphorbium.

Euphorbium vulgatius.

The root is large, black, divided into many parts, and hung with large fibres.

The plant riſes from this in a ſingular manner, not with a ſtalk and leaves, as all thoſe hitherto deſcribed, but with ſeveral robuſt, thick, fleſhy ſtems: theſe are formed into a number of ſmall faces, with ſo many angles, and are of a deep blackiſh green: they are as thick as a child's arm at the bottom, ſomewhat ſmaller at the top, a foot or more in height, and armed at the edges of all the planes or angles with extremely ſharp prickles placed two together.

This is the general face and appearance of the plant, and is all that is with us uſually ſeen of it: there never are any leaves, nor any other ſtem than theſe ſtrange pieces.

When it has flowers, they burſt out in various parts at the angles or edges, and are of a yellowiſh green colour; each is ſucceeded by a ſingle capſule, of a roundiſh form, but marked in three places with lines, and containing three ſeeds.

It is a native of Africa, and flowers there in Auguſt.

Iſnard calls it *Euphorbium polygonum ſpinoſum cerei effigii*. Others ſimply *Euphorbium*.

If any part of the plant be cut or broken, there flows out a cauſtick liquor, which preſently hardens into a reſinous ſubſtance, of a burning, fiery taſte, and horrible qualities.

The hardened juice of this plant is the drug called *euphorbium*. It was once given as a purge in dropſies, and other deſperate diſtempers, but a better practice has rejected it. The operation was by vomit and ſtool, and both in extremes; and it often inflamed the inteſtines. We find at preſent medicines that anſwer the ſame purpoſe, without the danger of theſe terrible conſequences.

Surgeons once uſed it in the cure of carious bones; but they found it ſo ungovernable even in that application, that it is now utterly neglected.

The plant here deſcribed affords the *euphorbium* of late time brought into the ſhops; but it was from another of the ſame genus that the *euphorbium* was obtained in the times of the antients: the difference of the plant is, however, no more than that of ſpecies of the ſame kind; and that of the drug no more than might be expected in ſuch a caſe. The *euphorbium* of the antients

was rather milder than that of later time; but they are both much better baniſhed than employed.

2. The Euphorbium of the Antients.

Euphorbium antiquorum.

The root is thick, white, woody, and very long: it penetrates ſtrait down into the earth, and is hung with many fibres.

From the head of this root riſes a ſingle ſtem, which is triangular uſually; but this admits variation, for it is ſometimes ſquare: it is thick, firm, upright, jointed, branched, and twelve or fourteen feet high.

The angles riſe high upon it, and are armed with double thorns, which are ſhort, but very ſtrong and ſharp. Theſe angles or edges do not run ſträit, but are waved or ſinuated, and the whole ſtalk is ſomewhat flatted: the ſpines are of a ſhining brown, and the plant itſelf of a deep green.

Toward the top it divides into ſeveral branches, and from its ſide there riſe many others.

Theſe are large, thick, and triangular, ſomewhat flatted, and of the ſame ſhape with the trunk, and armed in the ſame manner with prickles.

Toward the upper part of the plant there riſe, at the ſame places with the ſpines, certain fine, ſmall rudiments of leaves, if they may be ſo called; but they never expand, nor are of long duration.

The former kind is abſolutely naked; but theſe are a kind of approach to leaves in this.

The flower is compoſed of four petals, and the ſeed-veſſel contains three large ſeeds.

It is a native of the Eaſt Indies, and flowers in Auguſt.

Linnæus calls it *Euphorbia aculeata ſubrotunda triangularis articulata ramis patentibus.*

3. Five cornered Euphorbium.

Euphorbium quinquangulare.

The root is a vaſt white body, ſending out from its bottom numerous thick fibres.

From this riſe numerous naked ſtems, ſometimes two or three joined in a body juſt above the root, and divided afterwards; and not unfrequently a ſingle ſtem riſes, from which, after it has grown up a foot or more, there burſt out ſeveral new ſhoots all round. There is all this variation in the plant; nor is it exact any more than the preceding ſpecies in its number of angles or corners, but five is the moſt general and natural: the main trunk at the bottom ſometimes has only four, and the youngeſt ſhoots have ſometimes more than five, but the body of the plant is quinquangular.

The main trunk is full of fleſhy tubercles, and, when it has ſtood ſome time, grows whitiſh, and hard.

The ſhoots riſe to four or five feet high; and are of a bright green, thick, fleſhy, and armed at all the edges, with black ſhining prickles riſing in pairs, and pointing downwards; and they are uſually crooked.

It has no leaves, nor often flowers with us.

It is a native of the Canaries, and there has four-leaved flowers, and large ſeed-veſſels.

Linnæus calls it *Euphorbia aculeata nuda ſubquinquangularis aculeis geminatis.*

4. Single, ſpined, many-cornered Euphorbium.

Euphorbium ſpinis ſolitariis multangulare.

The root is large, thick, white, and divided, and towards the bottom ſends out many fibres.

A ſingle ſtem frequently riſes from the head of the root, and nothing more; ſometimes there are two or three, but in this caſe they are perfectly diſtinct; ſo that each is an entire plant.

This is thick, fleſhy, and divided into a multitude of faces, by riſing corners or angles, and is of a deep green, uſually ſmaller at the bottom, and larger to the top; but this not conſtantly or univerſally.

The edges are armed with prickles; and theſe ſtand ſingly, not in pairs, as in all the former ſpecies; and they are brown, hard, and gloſſy.

The flowers are numerous, and grow principally toward the upper part of the plant: they are compoſed each of four petals, and ſucceeded by a large, round ſeed-veſſels, divided within into three cells, in each of which is a ſingle ſeed.

It is a native of Æthiopia, and flowers in June.

Burnan calls it *Euphorbium aphyllum anguloſum florum coma denſiſſima.*

5. Scaly Euphorbium.

Euphorbium ſquammatum.

The root is long, ſlender, creeping, and divided into many parts.

From this riſes a large body, of the bigneſs of a child's head, and of a woody ſubſtance: its ſurface is covered with irregular lumps and tubercles, and its colour is brown.

From the head of this ſingular lump riſe numerous ſtalks: they are thick at the bottom, ſmaller all the way upward, and a foot high.

Toward the lower part they are covered with ſquare tubercles in the manner of the lump at the bottom, only more diſtinct: higher up theſe tubercles grow thinner, and lie over one another like ſcales: they are longer and narrower as they advance more in length, and have at their baſes certain ſmall and narrow leaves: the tops of all the ſtalks are terminated alſo by theſe ſort of leaves.

It rarely advances farther than this ſtate with us; but where it is perfect the flowers are compoſed of four petals, and the ſeed-veſſel is roundiſh, and divided into four cells.

It is a native of Æthiopia, and flowers in July.

Commelin calls it *Planta lactaria Africana.*

GENUS III.

FLEAWORT.

PSYLLIUM.

THE flower is compoſed of four ſmall oval petals, joined at their baſe: the cup is very ſmall, formed of a ſingle piece, and divided into five ſegments at the edge: the ſeed-veſſel is oval, and the ſeeds are numerous: the ſtalks are branched, and have leaves upon them.

Linnæus places this among the *tetrandria monogynia*; the threads in each flower being four, and the ſtyle from the rudiment of the fruit ſingle.

He joins it, as before obſerved, with the plantain, not allowing it to be a diſtinct genus. Mr. Ray probably led him into this error, for he firſt fell into it; but the genera are perfectly diſtinct.

The flowers and ſeed veſſels agree indeed in both; but the ſtalks, and manner of growing, differ altogether: the plantains have leaves from the root only, and ſimple ſtalks; the *pſylliums* have branched ſtalks, and leaves on them.

1. Common Fleawort.

Pſyllium vulgare.

The root is long, thick, white, and furniſhed with many fibres.

The ſtalk is round, upright, very much branched, and a foot and half high.

The leaves are numerous: they ſtand alternately, and are long and narrow, of a deep green: they are not at all divided at the edges, but pointed at the ends; and they commonly have tufts of young ones, and rudiments of branches, in their boſoms: ſo that the whole plant has a confuſed aſpect.

The flowers ſtand at the tops of the branches in ſmall, round ſpikes: they are little, and inconſiderable.

The ſeed-veſſels are ſmall and oval, and the ſeeds are very numerous and gloſſy: their colour is black, and from their ſhape, ſize, and ſhining ſurface, they have been ſuppoſed to reſemble fleas.

It is common in the hedges of all the warmer parts of Europe, and flowers in June.

C. Bauhine calls it *Pſyllium majus erectum.* Others, *Pſyllium vulgare.*

The ſeeds are uſed for making a mucilage, which is good in ſore mouths, waſhing the mouth well, and ſpitting it out.

It has been given internally as a purge; but there are accounts of very bad effects from it, faintings, and imminent danger of death: it is therefore diſuſed.

2. Jagged Fleawort.

Pſyllium foliis ſerratis.

The root is long, white, and ſlender.

The ſtalk is round, upright, branched, and a foot and half high.

The leaves ſtand alternately, and are long, narrow, and jagged, and of a pale green.

The flowers ſtand at the tops of the branches, in oblong ſpikes, and are ſmall and inconſiderable.

The ſeed-veſſel is oval, and the ſeeds are large and black.

It is a native of the Eaſt, and flowers in June.

C. Bauhine calls it *Pſyllium Dioſcoridis, vel Indicum foliis crenatis.*

This, and not our common kind, ſeems to have been the *fleawort* of the antients; but they appear ſo much the ſame in virtues, that the difference is not eſſential.

3. Creeping Fleawort.

Pſyllium repens.

The root is long, and divided, and furniſhed with many fibres.

The ſtalks are numerous, round, and of a pale green.

They lie upon the ground for the greateſt part of their length, and only raiſe up ſhoots of ten inches high to bear the flowers.

The main branches, as they lie, take root at the joints, and the plant ſpreads into very large tufts.

The leaves are long, narrow, of a greyiſh green, and a little hairy: they ſtand alternately, and have thick tufts of ſmall leaves, and ſhoots of young branches in their boſoms.

The flowers ſtand in ſhort tufts or ſpikes, on long footſtalks riſing from the boſoms of the leaves, and they are ſmall and whitiſh.

The ſeed-veſſels are oval, and the ſeeds are ſmall.

It flowers in autumn, but the young ſhoots are freſh and green the greateſt part of winter.

It is frequent in the ſouth of France.

C. Bauhine calls it *Pſyllium majus ſupinum.* Lobel, *Pſyllium ſempervirens, Evergreen fleawort*; and the common writers follow him.

Theſe are the plants, native and foreign, commonly cultivated, which have four petals in the flower, and a ſingle capſule for the ſeeds.

We have obſerved there is a numerous family of plants, with four petals in the flower, and a pod, not a capſule, for the ſeeds: theſe, if the number of the petals only were regarded in this method, would follow here; but our characters are eſtabliſhed upon the flower and ſeed-veſſels together: we ſhall therefore here purſue the tract

of

of nature in the plants with ſingle plain capſules for the ſeed; and follow her ſteps, as ſhe allows more and more numerous petals to the flower in plants ſo diſtinguiſhed by the fruit. The laſt claſs having contained thoſe which have with a ſingle capſule four petals, the following will comprehend thoſe which have with a ſingle capſule five petals; and from theſe we ſhall advance to the conſideration of ſuch as have ſix, or more than ſix petals, with the ſame kind of ſeed-veſſel.

Theſe being deſcribed, we ſhall treat of thoſe which have pods with four-leaved flowers, and thoſe which have pods with papilionaceous flowers.

This is the method we have laid down, as moſt conformable to nature: and thus much we have judged proper, indeed neceſſary, to ſay of it here; leſt, as the work appears in ſeparate parts, the reader, who cannot till the whole is delivered to him, determine properly of it, ſhould be miſled by an opinion founded on parts of it only, and led to ſuppoſe that through miſtake omitted in this place, which we hope is rightly reſerved to another.

The END of the EIGHTH CLASS.

CLASS

THE

BRITISH HERBAL.

CLASS IX.

Plants whoſe flower conſiſts of FIVE PETALS *regular in form and diſpoſition, whoſe ſeeds are contained in a* SINGLE CAPSULE, *and whoſe leaves grow in pairs.*

THIS is a very large and numerous claſs; nature has perfectly connected together the plants it comprehends, and obviouſly diſtinguiſhed them from all others: yet, as in other caſes, ſo in this, the modern method, eſtabliſhed ſolely upon the number of threads, and their diſpoſition in the flower, has ſeparated many of them from the reſt, and placed them among others with which they have no natural alliance.

Nature is ſo uniform, in even her ſmalleſt traces, that, in general, theſe minute parts are diſpoſed alike in plants of the ſame claſſes; but not univerſally. This general conformity of the ſmaller with the larger parts led Linnæus to imagine that a method might be eſtabliſhed on their number and diſpoſition, which would take in the larger, more obvious, and more eſſential parts, only as ſubordinate; and, as this would be ſure to carry an air of novelty, it was natural to ſuppoſe it would pleaſe the ſtudent, and do honour to the inventor.

Had it proved true that nature was as ſtrict in theſe ſmaller as in the larger parts, a method might, as uſefully, have been founded on them as on the others: at leaſt, it would have been liable to no other objection but that of being leſs plain and familiar: but when Linnæus found that, though many of the plants in each natural claſs thus anſwered to the characters of his artificial ones, there were ſeveral that did not, he ſhould then have given up the deſign.

That he did find this is certain; becauſe he has ſet down innumerable inſtances of it under the name of exceptions to his generical characters; and he will daily, in his careful attention to the ſubject, find more: but, probably, he had gone too far to recede, before he diſcovered that theſe exceptions were ſo numerous. It appears to me that he formed his characters of the common plants principally from Tournefort's figures, and thoſe of the more rare, in general from thoſe of Plumier. Theſe figures are excellent, and particularly accurate; but, although generally right in the minuteſt parts, yet they ſometimes vary from nature in them; their authors not having been ſo careful in theſe leſſer parts as they would have been, if, like Linnæus, they had intended to eſtabliſh a method upon them.

This ſeems to have been the foundation of Linnæus's ſyſtem: and when, in examining the plants themſelves, he found they did not exactly anſwer theſe figures, and his characters eſtabliſhed upon them, he has, with candour equal to his diſcernment and aſſiduity, ſet it down in his ſucceeding works.

Upon this view of the Linnæan method, the reader will be able to form a proper judgment of it; and not too diſadvantageous a one of its author, whoſe very faults have been accompanied with excellencies.

With reſpect to the plants of the preſent claſs, all that anſwer the character eſtabliſhed in few words, as its diſtinction, are here brought together.

Mr. Ray, who forms a claſs of the ſame kind, his *pentapetalæ vaſculiferæ*, makes it more comprehenſive, for he includes in it all that anſwer to that name; placing their other diſtinctions as ſubordinate: but, as we have ſet out upon the plan of diſtinguiſhing the plants by as ſuccinct aſſortments as nature admits, we have of theſe made three claſſes.

The plants which have five petals in the flower, and a ſingle capſule ſucceeding, differ ſo far, that ſome have theſe petals regular in their form and diſpoſition, as *Saint John's wort* and *lychnis*; others have them diſpoſed irregularly, as the *violet*. The form and faſhion of theſe flowers differs ſo much that they may be ſafely arranged under two claſſes; and it is ſo obvious that they will be eaſily known, and never miſtaken: ſome have alſo the leaves in all the ſpecies in pairs, and ſome alternately and irregularly; this, 'though leſs abſolute, yet is an obvious diſtinction; and, in a uſeful ſyſtem, will very well ſerve as a claſſical character.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this country.

GENUS I.

PINK.

CARYOPHYLLUS.

THE flower conſiſts of five petals, which are regularly diſplayed, jagged at their broad ends, and very narrow at the baſe, where they adhere to the receptacle: the cup is long, hollow, divided into five ſegments at the edge, and ſurrounded at the baſe with four little ſcales, forming, as it were, a ſmaller cup for it: the ſeed-veſſel is oblong, cylindrick, and covered; and ſplits in four parts at the top.

Linnæus places this among the *decandria digynia*; the threads in each flower being ten, and the ſtyle from the rudiment of the capſule divided into two parts.

I have obſerved before, that if the author had named his diſtinctions in this reſpect, from the rudiment, rather than the ſtyles riſing from it, his method would have been more natural: the *pink* would then have ſtood among the *monogynia*, to which, beyond a doubt, it naturally belongs; the capſule, which is the true eſſential female part, being ſingle. Linnæus calls this genus *dianthus*.

DIVISION I. BRITISH SPECIES.

1. Maiden Pink:

Caryophyllus virgineus.

The root is ſmall, white, and creeping.

The ſtalks are numerous, ſlender, weak, and ſpread upon the ground.

They are full of young ſhoots, and thick covered with leaves: thoſe ſtalks which bear the flowers riſe from theſe, and grow to five or ſix inches high, or, in a favourable ſoil, higher.

The leaves are very narrow, conſiderably long, and of a pale greyiſh green: they are ſmall at the baſe, and pointed at the end.

The flowers are long, and of a bright red: they ſtand ſometimes ſingly, one only at the top of the ſtalk: but this is no certain mark; for ſometimes there grow two or three together.

The ſeed-veſſel is oblong, and the ſeeds are ſmall, rough, and black.

It is found wild in our northern counties, and in ſome other places; and flowers in June. It varies extreamly in ſize according to the accidents attending its growth; ſo that ſome have made out of it ſeveral ſpecies.

Authors call it *Caryophyllus Virgineus.*

2. Broad-leaved Maiden Pink.

Caryophyllus foliis latioribus.

The root is long, ſlender, white, and undivided.

The ſtalks are numerous, and lie in part upon the ground, but thoſe which ſupport the flowers riſe to four or five inches in height.

The leaves are numerous, broad, ſhort, and of a pale green: thoſe which ſtand toward the upper part of the ſtalks near the flowers are narrower than the others, and longer; but even theſe are broader than thoſe of the preceding ſpecies.

The flowers are large, and of a beautiful red: one ſtands at the top of each ſtalk.

The ſeed-veſſel is long and roundiſh: the ſeeds are numerous and rough.

It is found on hills in our northern counties of England, and flowers in June.

Ray calls it *Armeriæ ſpecies flore in ſummo caule ſingulari.*

3. Com-

3. Common wild Pink.

Caryophyllus ſylveſtris vulgaris.

The root is of an irregular ſhape and firm ſubſtance; long, divided, brown, and wrinkled on the ſurface.

The ſhoots riſe in great numbers, and have a multitude of leaves on them: theſe are very long and narrow, of a greyiſh green, and of a firm ſubſtance.

The ſtalks are numerous, greyiſh green, and round: they are jointed at ſmall diſtances, and branched toward the tops.

The leaves on thoſe are ſhort, narrow, and ſharp-pointed: they ſtand in pairs, as in all the other ſpecies, and are broad at the baſe, and ſmaller all the way to the end.

The flowers are of a pale red, and jagged at the edges.

The ſeed-veſſel is oblong, and the ſeeds are large.

It is wild on the barren rocks in our northern counties; and frequently on walls; but there it ſeems to have owed its origin to ſcattered ſeeds from ſome garden plants: in the other places it is evidently a native.

C. Bauhine calls it *Caryophyllus ſimplex flore minore pallide rubente.* Many of our *garden pinks* are varieties from this ſtock.

4. Deptford Pink.

Caryophyllus barbatus.

The root is long, ſlender, divided, and hung about with fibres.

The firſt ſhoots are numerous, upright, and furniſhed with ſeveral pairs of leaves.

The ſtalk is round, firm, upright, and of a deep green: it is a foot and half high, and jointed at conſiderable diſtances.

The leaves are long, narrow, and of a deep green.

The flowers ſtand at the tops of the ſtalks, and of numerous young ſhoots riſing from the boſoms of the leaves; and they are cluſtered together in a kind of bearded huſks: they are ſmall, and of a beautiful red.

The ſeed-veſſel is long, and the ſeeds are large, rough, and brown.

It is common by way ſides in many parts of England; and flowers in June.

C. Bauhine calls it *Caryophyllus barbatus ſylveſtris.* Others, *Armeria ſylveſtris.*

5. Proliferous Pink.

Caryophyllus prolifer.

The root is long, white, woody, divided, and furniſhed with many fibres.

The ſtalk is round, upright, ſlender, ten inches high, and very much branched.

The leaves are very narrow, long, and ſharp-pointed; and they are of a pale green.

The flowers are ſmall, and of a bright red.

They grow at the tops of the ſtalks in a cluſtered manner; and the ſcales at the bottom of the cup exceed the body of it in length.

The ſeed-veſſel is longiſh, and ſlender; and the ſeeds are rough and black.

It is wild in ſome of our weſtern counties, but not common. It flowers in July.

C. Bauhine calls it *Caryophyllus ſylveſtris prolifer*; and moſt others follow him.

DIVISION II. FOREIGN SPECIES.

1. Clove Julyflower.

Caryophyllus flore magno.

The root is long, divided into ſeveral parts, and hung with many fibres.

The ſhoots are numerous, and have many long, narrow leaves on them, of a pale green colour, and ſmooth ſurface.

The ſtalk is round, upright, firm, ſmooth, and frequently jointed: it riſes to two feet in height, and is branched toward the top.

The leaves on it ſtand in pairs, as in the others: they are like thoſe from the root, but broader and ſhorter.

The flowers are large, and of a deep purple: the petals are broad, and jagged at the edges; and they have a fragrant ſcent, not unlike that of the clove ſpice.

It is a native of Italy, and flowers in July.

The varieties that have been raiſed from this are endleſs and innumerable. This ſingle flower is the ſource from which the ingenuity of gardeners has raiſed that vaſt and beautiful variety of carnations, which they are ſtill encreaſing by the ſame means.

In its wild ſtate it varies the colour, from the full and rich purple of which we ſee it in gardens, through all the changes of red down to abſolute white; and from this variation in nature the hint has probably been taken for all thoſe elegant kinds raiſed by care and culture.

2. Jagged Pink.

Caryophyllus flore diſſecto.

The root is long, white, divided, and furniſhed with many fibres.

The firſt ſhoots are very numerous, and cluſtered thick with leaves: theſe are long, narrow, of a greyiſh white, and ſharp-pointed.

The ſtalks are many, round, upright, jointed, divided into ſeveral branches, and a foot and half high.

The leaves ſtand in pairs, and are oblong, narrow, and pointed.

The flowers ſtand at the tops of the ſtalks and branches, and are large, and beautifully jagged all the way on the edges.

The ſeed-veſſel is long and rounded: the ſeeds are large and brown.

It is a native of Italy, and flowers in July.

The flowers are commonly white, ſometimes red.

C. Bauhine calls it *Caryophyllus flore tenuiſſime diſſecto.*

3. Broad-

3. Broad-leaved Sweetwilliam.

Caryophyllus barbatus latifolius.

The root is long, thick, white, and divided.

The ſtalks are numerous, round, jointed, uſually crooked from joint to joint; and of a pale green colour.

The leaves ſtand two at each joint; and they are oblong, broad, and of a freſh green: they ſometimes ſtand obliquely upwards, but for the moſt part bend down.

The flowers are moderately large, and naturally are white or rediſh; but culture gives them many variations in this reſpect: they ſtand in large tufts at the tops of the ſtalks: the ſcales at the bottom of the cup are as long as its hollow body; and the ſeed-veſſels are oblong, and contain numerous duſky ſeeds.

It is a native of Spain, and flowers in Auguſt.

C. Bauhine calls it *Caryophyllus barbatus ſylveſtris latifolius.*

4. Narrow-leaved Sweetwilliam.

Caryophyllus barbatus anguſtifolius.

The root is long, white, ſlender, and divided.

The ſtalks are numerous, round, ſlender, upright, and a foot high.

The leaves ſtand in pairs, and they are long and narrow, and of a pale green.

The flowers ſtand at the tops of the ſtalks, and are numerous, and moderately large.

The ſeed-veſſel is longiſh, and the ſeeds are numerous, rough, and black.

It is a native of Italy, and flowers in Auguſt.

C. Bauhine calls it *Caryophyllus hortenſis latifolius barbatus.* But its leaves are much narrower than thoſe of the others.

All theſe ſpecies of *caryophyllus* have the ſame medicinal qualities, and their virtue is principally in the flowers. Thoſe of the purple kind, or what is called the *clove Julyflower*, poſſeſs them in the greateſt degree. They are cordial and cephalick. They are good in faintings, head-achs, and other nervous diſorders. We keep a ſyrup of them in the ſhops, which is not without virtue, but is loaded with ſugar, as is neceſſary for keeping in that form. The beſt method of giving them is in a ſtrong tincture in brandy.

GENUS II.

CAMPION.

LYCHNIS.

THE flower is compoſed of five petals, with long baſes, and uſually divided into two or four ſegments at the rim: the cup is roundiſh, ſwelled, and divided at the edge into five ſegments; and the ſeed-veſſel is ſingle, of an oval figure covered, formed of five valves, and has only one cell.

Linnæus places this among the *decandria pentagynia*; the filaments in the flower being ten, and the ſtyles riſing from the rudiment of the fruit five.

DIVISION I. BRITISH SPECIES.

1. Common Sea Campion.

Lychnis maritima vulgaris.

This root is long, thick, and furniſhed with many fibres.

The firſt ſhoots are numerous, and cluſtered with leaves: they are ſhort, and of a greyiſh green, and hoary.

The ſtalks are round, ſmooth, of a greyiſh green, numerous, a foot and half long, but weak, and not well able to keep themſelves upright; often they all lie ſpread upon the ground; ſometimes they all ſtand erect.

The leaves are oblong, broad at the baſe, ſharp at the point, and of a pale green.

The flowers ſtand at the tops of the ſtalks and branches; and are large and white: their cup is ſwelled, and dented at the edge pretty deeply.

The ſeed-veſſel is large and oval; and the ſeeds are numerous and roundiſh.

It is common about our ſea-coaſts; and flowers in July.

C. Bauhine calls it *Lychnis maritima repens.*

2. Common white Corn Campion.

Lychnis vulgaris alba quæ Behen album vulgo.

The root is long, white, and thick; and is furniſhed with many thick fibres.

The ſtalks are numerous, round, upright, conſiderably branched, and two feet high.

The leaves ſtand in pairs, and are large, and of a pale green: they are broad at the baſe, not at all indented at the edges, and ſharp-pointed.

The flowers ſtand at the tops of the branches, into which the ſtalk divides, and of thoſe ſhoots which riſe from the boſoms of the upper leaves: they are large and white.

The ſeed-veſſel is oval, and the ſeeds are large.

It is common in our corn fields, and flowers in Auguſt.

C. Bauhine calls it *Lychnis ſylveſtris quæ ben album vulgo.* Others, *Behen album*, and *papaver ſpumeum.* In Engliſh it is alſo called, from that Latin name, *Spatling poppy*, as alſo *White bottle*, and *White ben.*

A ſmall inſect is frequently found upon the

Garden Rue

Sharp leavid Rue

Fine leavid Rue

Common Euphorbium

The Euphorbium of the Antients

Lady Euphorbium

Single Spind Many Cornerd Euphorbium

Five Cornerd Euphorbium

Common Flea wort

Creeping Flea wort

Maiden Pink

Small Mountain Broad leavid Pink

Common Wild Pink

Scotford Pink

Babylonian Pink

Clove July Flower

White Jagged Pink

Bread leavid Sweet William

Narrow leavid Sweet William

leaves of this plant, covered with a froth of its own raiſing. This has been imagined to proceed from the plant, and thence it had theſe fanciful additions to its name; but it is in reality the creature's method of ſecreting or preſerving itſelf from many inſects, to which it would otherwiſe become an eaſy prey.

3. Heath-leaved Sea Campion.

Lychnis maritima ericæ folio.

The root is long, hard, woody, and furniſhed with long and tough fibres.

The ſtalks are numerous, round, weak, procumbent, and jointed: they are naturally of a pale green, but frequently rediſh.

The leaves are numerous, and placed in pairs: they are very ſingular in their ſtructure, and have ſome remote reſemblance of thoſe of the common heath.

The flowers grow at the ends of the ſtalks and branches; and are large, and of a bright red.

The ſeed-veſſels are large and oval; and the ſeeds are numerous and turgid.

It is found on ſandy banks by the ſea, and ſometimes at conſiderable diſtances from it. It flowers in June.

C. Bauhine calls it *Polygonum maritimum minus folio ſerpylli*; and Parkinſon, *Erica ſupina maritima Anglica.*

Mr. Ray very properly obſerves that its leaves have not the leaſt reſemblance of thoſe of *ſerpyllum*, nor its flowers of thoſe of *heath*: it is properly a *campion*, though ſo very different in its aſpect from the generality of others, that it is not a wonder thoſe who were accuſtomed to judge, more by the general appearance of a plant than by an examination of its flowers and ſeed-veſſels, called it by very different and various names.

4. Jagged flowered Campion.

Lychnis flore laciniato.

The root is long, thick, divided, and furniſhed with numerous fibres.

The firſt ſhoots are weak and round, uſually of a rediſh colour: they lie upon the ground, and ſend out roots of their own.

The leaves that riſe from theſe are ſingle, oblong, broadeſt in the middle, undivided at the edges, and ſharp-pointed; and they are commonly of a brown colour.

The ſtalks are numerous, upright, round, jointed, and two feet high: they are uſually of a browniſh or purpliſh colour, and rarely are much branched.

The leaves ſtand in pairs: they are oblong, narrow, undivided at the edges, and ſharp-pointed: and they are of a deep green.

The flowers ſtand at the tops of the ſtalks, ſix or eight together; and they are of a pale red, and are cut into numerous long and ſlender ſegments.

The ſeed-veſſel is large and oval: the ſeeds are large and roundiſh.

It is common in meadows, and flowers in June.

C. Bauhine calls it *Caryophyllus pratenſis laciniato flore ſimplici, ſeu flos cuculi.* Others, *Lychnis plumaria pratenſis.* In Engliſh we call it *Cuckow-flower*, *Wild Williams*, and *Ragged Robins.*

It is ſometimes found wild with a double flower. Culture eaſily gives it this advantage, and renders it very beautiful: we have it in this condition frequent in our gardens, and varying with red and white flowers.

5. Wild Campion, called Soapwort.

Lychnis ſaponaria dicta.

The root is compoſed of a great number of large, thick, and ſpreading fibres.

The ſtalks are numerous, round, upright, and two feet and a half high.

They are of a pale green colour, and jointed; and the knobs, or joints, are round, thick, and white.

The leaves are large, and of a beautiful freſh green: they ſtand in pairs, and have large veins.

The flowers are large, and ſometimes rediſh: they ſtand in conſiderable numbers on the tops of the ſtalks.

The ſeed-veſſel is large and oval; and the ſeeds are numerous.

It is not uncommon in many of our counties, and thrives beſt under a damp hedge. It flowers in June.

We ſometimes meet with it naturally with a double flower, in which caſe it is very beautiful.

Linnæus, who frequently perplexes the ſtudent by joining together ſeveral genera, which others, with reaſon, have treated as diſtinct, here runs to the oppoſite extream. He ſeparates *ſaponaria*, or *ſoapwort*, from the *lychnis*; but the diſtinction is not properly that of one genus from another, but of the ſeparate ſpecies of the ſame genus. Ray has followed nature with more care, who joins this with the *lychnis*; and the generality of authors are of the ſame opinion, ranking it under this genus. We are the more careful to follow Ray rather than Linnæus in this article, becauſe the latter not only ſeparates the *ſaponaria* from *lychnis*, but joins with it ſeveral other ſpecies, the *vaccaria*, *cymoides*, and others, to be named hereafter.

It is true that the *ſaponaria* has but two ſtyles upon the capſule, and the other ſpecies hitherto deſcribed have five; but it muſt be ſufficient to name ſuch a variation in the deſcription of it as a ſpecies. We have, in the ſame manner, kept together the *lychnis's*, though ſeparated by this author, as in other inſtances of a like kind.

After deſcribing the *ſoapwort*, we are here alſo to mention a particular variety of that plant, deſcribed by our Engliſh botaniſts, and preſerved in our gardens. This, though no more than we have called it, a variety, yet is ſo ſingular that we have added its figure. The two leaves at the knots frequently join into one, which ſurrounds the ſtalk in a particular manner; and the flowers vary in the ſame manner as the leaves; for their five petals unite, and the whole forms a tubular flower.

It was originally found wild in a grove near Lichbarrow in Northamptonſhire; but it is now loſt there, only the *common ſoapwort* being found in the place. Probably the roots were all taken up and carried into gardens: they have been

there propagated; and the plant is common enough among thoſe who love theſe things. It keeps pretty conſtant to its hollow-leaved condition, but not with perfect regularity.

6. Wild Campion, called Cockle.

Lychnis ſegetum nigellaſtrum dictum.

The root is long, ſlender, ſimple, and furniſhed with few fibres.

The ſtalk is upright, round, hairy, ſcarce at all branched, and a foot and half high.

The leaves grow two at a joint; and they are long, narrow, hairy, not at all indented, and of a pale green.

The flowers ſtand at the top of the ſtalk, and of ſome few ſhoots riſing from the boſoms of the upper leaves: they are large, and of a fine deep red.

The ſeed-veſſel is large, as are alſo the ſeeds.

It is common in our corn-fields, and flowers in July.

C. Bauhine calls it *Lychnis ſegetum major*. Others, *Nigellaſtrum*, and *Pſeudomelanthium*.

7. Common, wild, white Campion.

Lychnis ſylveſtris alba vulgaris.

The root is long and thick, and has few fibres.

The firſt leaves are numerous: they riſe in a large, thick, upright tuft, and are oblong, broad, of a freſh green, not indented, and ſharp-pointed.

The ſtalk is round, firm, upright, very much branched toward the top, and two foot high.

The leaves ſtand in pairs: they are oblong, broad, undivided, and ſharp-pointed.

The flowers are large and white; and the cups ſtriated, but not ſo much ſwelled as thoſe of the white ben.

The ſeed-veſſel is large, as are alſo the ſeeds.

It is common in paſtures and about hedges. It flowers in July.

C. Bauhine calls it *Lychnis ſylveſtris alba ſimplex*.

It is ſometimes found with the flower naturally double: it frequently owes that advantage to culture, and is thence called the *double white campion*; or, in the gardeners language, *white batchelors buttons*.

8. Common red wild Campion.

Lychnis flore rubello.

The root is long, ſlender, and has few fibres.

The firſt ſhoots are full of leaves; and thoſe are long, broad, and of a deep green.

The ſtalks are numerous, round, hairy, branched, and weak.

The leaves are placed two at a joint; and they are broad and hairy, and of a freſh green.

The flowers ſtand at the tops of the branches; and are large, and of a pale red.

The ſeed-veſſels are large and oval; and the ſeeds alſo are large.

It is common in damp hedges, and flowers in June.

C. Bauhine calls it *Lychnis ſylveſtris ſive aquatica purpurea ſimplex*. Others, *Lychnis ſylveſtris rubello flore*.

This ſpecies is taken into gardens, and rendered double by culture; in which ſtate it makes a very beautiful appearance, and is called *red batchelors buttons*; or, by others, *double red campion*.

9. Small flowered Corn Campion.

Lychnis arvenſis flore minimo.

The root is ſmall, oblong, white, and furniſhed with a few fibres.

The ſtalks are round, hairy, weak, jointed, and of a pale green.

The leaves grow in pairs, and are oblong and narrow: they are hairy alſo, and of a pale colour.

The flowers are very ſmall, uſually white, but ſometimes rediſh.

The ſeed-veſſel is large, as are alſo the ſeeds.

It is not uncommon in the corn-fields of Kent and Suſſex; and flowers in July.

Ray calls it *Lychnis ſylveſtris flore albo minimo*. Others, *Lychnis arvenſis flore minimo rubente*.

10. White-flowered clammy Campion.

Lychnis viſcoſa flore albo.

The root is long, thick, and furniſhed with a few fibres.

The leaves that firſt grow from it are oblong, broad, and of a pale green: they riſe in a conſiderable number, and have long footſtalks.

The ſtalks are numerous, ſlender, upright, round, and jointed.

The leaves grow in pairs, and have long footſtalks: they are oblong, broad, not at all indented at the edges, and pointed at the ends.

The flowers grow at the top of the ſtalk, and on ſhoots riſing from the boſoms of the upper leaves: they are white, and the petals are very deeply divided from the top: they quickly fall off.

The ſeed-veſſel is large, and the ſeeds are brown.

It is found on ditch-banks, and on walls in ſome parts of the kingdom, but is not common. It flowers in July.

C. Bauhine calls it *Lychnis montana viſcoſa alba latifolia*.

The tops of the ſtalks in this plant are clammy, principally juſt under the flowers, and hence has riſen the name of *viſcoſa* and clammy.

11. Great night-flowering Campion.

Lychnis noctiflora major.

The root is long and thick, and is furniſhed with many fibres.

The firſt ſhoots are numerous, round, firm, and jointed; one or more in the middle uſually ſtands upright; and ſeveral others trail upon the ground all round it.

The leaves grow in pairs, and are thick, of a deep green, hairy, not at all dented, and blunt at the ends.

The flowers grow on the tops of the ſtalks, and of numerous branches that riſe from the boſoms of the leaves all the way up the plant: they

are

are large and white, and have the petals divided down the middle; ſo that they ſeem compoſed of ten inſtead of five.

The ſeed-veſſel is large: the ſeeds are ſmall and blackiſh.

It is not uncommon in our northern counties on rocks.

It flowers in July. The flowers open after ſun-ſet: at ſun-riſe next morning they draw together, but after ſun-ſet they open again; ſo that the plant is in its full bloom only in the night.

The ſtalks of this plant, juſt under the flowers, are ſometimes a little clammy.

Ray calls it *Lychnis major noctiflora dubrenſis perennis.*

12. Red night flowering Campion.

Lychnis noctiflora flore rubello.

The root is long, ſlender, and has but few fibres.

The firſt leaves are oblong, broad, of a pale green, not at all indented, and obtuſe at the ends.

The ſtalks are numerous, ſlender, jointed, and a foot and half high.

The leaves ſtand in pairs, and are oblong and obtuſe.

The flowers ſtand at the tops of the ſtalk and branches, and are ſmall, and of a faint, unpleaſing red: they are generally ſhut and look faded in the day-time; but they open at night.

The ſeed-veſſel is oval, and the ſeeds are ſmall, and of a dark brown.

It is found in the corn-fields of Surry, but not common. It flowers in July.

C. Bauhine calls it *Lychnis noctiflora*. J. Bauhine, *Ocymoides non ſpecioſum.*

13. Red narrow-leaved clammy Campion.

Lychnis viſcoſa rubra anguſtifolia.

The root is long, thick, divided, and often hung with numerous fibres.

The firſt leaves riſe in tufts from ſeveral diviſions at the head; and they are long, narrow, ſharp-pointed, without footſtalks; and of a deep but unpleaſant green.

The ſtalk is ſingle, upright, and a foot and half high.

The leaves ſtand in pairs, and are oblong, and of a freſh and fine green: they are broadeſt in the middle, undivided at the edges, and ſharp-pointed.

The flowers ſtand in a beautiful and regular cluſter at the top of the ſtalk: they are ſmall, and of a bright red.

The ſeed-veſſel is oval and large; and the ſeeds are numerous and ſmall.

It is found in Scotland, and in ſome of our northern counties, on rocks and mountains. It flowers in May.

The tops of the ſtalks in this ſpecies are very clammy; inſomuch that it is common to ſee flies entangled on them: hence this and other of the *campions* which have this quality are called *catch-flies.*

C. Bauhine calls this *Lychnis ſylveſtris viſcoſa anguſtifolia.* In England it is generally called *German catchfly.*

14. Moſſy-flowered clammy Campion.

Lychnis viſcoſa floribus muſcoſis.

The root is long, thick and furniſhed with many fibres.

The firſt leaves are very numerous; and they lie ſpread upon the ground in a regular manner: they have a kind of long footſtalks, and they are broad, ſhort, undivided, and obtuſe: the footſtalks, though commonly called ſuch, are more properly only a continuation of the leaves, in a narrower form, down to the root.

The ſtalk is round, upright, and of a pale green.

The leaves ſtand in pairs, and are long, and expand into breadth at the ends: they have young ſhoots in all their boſoms; ſo that the plant appears well covered with them.

The flowers ſtand at the tops of the ſtalks, and are numerous, but very ſmall; and of a yellowiſh green: the threads in them are very conſpicuous; and the whole have, as C. Bauhine expreſſes it, a moſſy appearance.

The ſeed-veſſel is oval and ſmall; and the ſeeds are ſmall.

It is common about Newmarket, and in many other parts of England in gravelly ſoils. It flowers in June.

The tops of the ſtalks are clammy in this, as in the other laſt named ſpecies.

C. Bauhine calls it *Lychnis viſcoſa flore muſcoſo.* Others, *Seſamoides ſalamanticum magnum.* J. Bauhine calls it *Ocymoides belliforme ſive muſcipula muſcoſo flore.* Some, *Spaniſh catchfly.*

15. Dwarf mountain Campion.

Lychnis montana minima.

This is a very ſingular plant; it is ſcarce more than an inch in height, but it grows in ſuch cluſters that it is very conſpicuous; and, when in flower, very beautiful: at other times it may be taken for a tuft of moſs, and eaſily paſſed over unregarded.

When viewed in the cluſter it appears a thick tuft of ſhort, green leaves, with numerous large, red flowers, ſtuck irregularly among them, and ſcarce ſeeming to belong to them: to ſee the ſtructure of the plant, an entire one muſt be ſeparated from the cluſter.

The root is very long, thick, and irregular in ſhape: it is brown on the ſurface, and has a few fibres.

The leaves riſe from the head of this root, and are very numerous, ſhort, narrow, ſharp pointed, and of a freſh green.

In the centre of theſe riſes the ſtalk, on which ſtands a ſingle flower.

This ſtalk is round, weak, of a pale green, and often leſs than an inch in height.

The flower is large, and of a pale but pretty red.

The ſeed-veſſel is oval and large: the ſeeds are ſmall.

It is common in Wales, and flowers in May and June.

Its ſmallneſs has led authors to call it by many names.

J. Bauhine calls it *Muſcus Alpinus flore inſigni dilute rubente.* Parkinſon, *Ocymoides muſcoſus Alpinus.* Ray and others, *Lychnis Alpina minima.*

16. Broad leaved, ſmooth, clammy Campion.

Lychnis viſcoſa latifolia lævis.

The root is long and ſlender, and has few fibres.

The firſt leaves riſe in a large tuft, and are broad, and of a pale green.

The ſtalk is round, upright, thick, of a pale green, very little branched, and a foot and half high.

The leaves grow in pairs without footſtalks: they adhere to the main ſtalk by a broad baſe, and are large, oblong, broadeſt at the baſe, ſmaller to the point, and of a pale green colour, and ſmooth ſurface.

The flowers ſtand in tufts, many together, at the tops of the ſtalks and branches: they are ſmall, and of a beautiful red: by their number, colour, and cluſtered manner of growth, though ſmall, they make a very beautiful appearance.

The ſeed-veſſel is little and oval; and the ſeeds alſo are ſmall.

It is found in the weſtern counties by the ſides of rivers; and flowers in June.

C. Bauhine calls it *Lychnis viſcoſa purpurea latifolia lævis.* J. Bauhine, *Centaurium minus adulterinum, quibuſdam lychnidis genus.*

17. Narrow-leaved Campion, with ſwoln cups.

Lychnis ſylveſtris anguſtifolia caliculis turgidis.

The root is ſmall, oblong, and white; and has a few fibres.

The leaves that riſe firſt from it are long, narrow, and of a deep green; ſharp-pointed, and not ſerrated at the edges.

The ſtalk is round, upright, of a whitiſh green, jointed, branched toward the top, and a foot and half high.

The leaves are placed in pairs, and they are long, narrow, and of a pale green: they adhere to the ſtalk by a broad baſe, and are ſharp-pointed, but not divided at the edges.

The flowers ſtand at the tops of the ſtalks, and are large and white; and the cups are large, ſmooth, and deeply ſtriated.

The ſeed-veſſel is oval, and the ſeeds are ſmall.

It is found in Kent and Eſſex, but not common. It flowers in July.

C. Bauhine calls it *Lychnis ſylveſtris anguſtifolia caliculis turgidis ſtriatis.*

DIVISION II. FOREIGN SPECIES.

1. Great ſcarlet Lychnis.

Lychnis coccinea major.

The root is compoſed of ſeveral thick fibres, divided, and edged with numerous ſmaller.

The ſtalks are numerous, thick, round, jointed, and two feet and a half high.

The leaves ſtand in pairs, and they are large, oblong, and broad: they have no footſtalks: they are ſomewhat hairy, and their colour is a yellowiſh green.

The flowers ſtand in thick cluſters at the tops of the ſtalks, and are large, and of a beautiful ſcarlet.

The ſeed veſſel is oval, and the ſeeds are ſmall.

It is a native of the Eaſt, and flowers in July.

We have it in gardens, where culture adds greatly to its natural beauty.

C. Bauhine calls it *Lychnis hirſuta flore coccineo major.* Our gardeners, *Scarlet lychnis.*

2. Roſe Campion.

Lychnis coronaria rubens.

The root is long, thick, and furniſhed with many fibres.

The firſt leaves are numerous, large, oblong, and white.

The ſtalks are numerous, round, and white alſo; and they grow to a yard in height: they are jointed, and very much branched.

The leaves ſtand in pairs, and they are large, white, and woolly.

The flowers ſtand at the tops of the ſtalks and branches, and are numerous, and of a beautiful red, very large and handſome.

The ſeed-veſſel is oval, and the ſeeds are brown.

It is a native of Italy, and flowers in June.

C. Bauhine calls it *Lychnis dioſcoridis ſativa.*

3. Cow Baſil.

Lychnis foliis perfoliatis calycibus pyramidatis.

The root is oblong, white, divided, and furniſhed with a few fibres.

The firſt leaves are numerous and oblong: they riſe without footſtalks, and are of a pale green.

The ſtalk riſes in the centre of theſe, and they ſoon after fade.

It is two foot high, round, light, hollow, very much branched, of a bluiſh colour, and duſty.

The leaves are large, oblong, broad at the baſe, undivided at the edges, and pointed at the end: they are of a pale bluiſh green colour.

They ſtand two at a joint, and encompaſs the ſtalk in ſuch a manner at the baſe that it appears to paſs through them.

The flowers are very numerous: they ſtand at the top of the main ſtalk and branches, and are ſmall, and of a pale red.

Their cup is large and pyramidal: it has five ribs, which are green, and the ſubſtance between them whitiſh.

The ſeed-veſſel is oblong: the ſeeds are round and black.

It is common in the corn-fields of France and Germany; and flowers in June.

C. Bauhine calls it *Lychnis ſegetum rubra foliis perfoliatis.* Others call it *Vaccaria*; and in Engliſh, *Cow baſil.* Linnæus, who diſtinguiſhes the *ſaponaria* from the *lychnis*, makes this a ſpecies of the former.

4. Lobels



Common Sea Campion



Common White Campion

Heath leav'd Sea Campion



Jagged flower'd Campion



Wild Campion

Call'd Lapwort



A Variety of Lapwort



Wild Campion

Call'd Cockle



Common Wild White Campion



Common Red Wild Campion

White flower'd Clammy Campion



Red German Catch fly



Mossy flower'd Clammy Campion



Dwarf Mountain Campion



Broad leav'd Smooth Clammy Campion



Narrow leav'd Campion With Swoln Cups



Great Scarlet Lychnis



Rose Campion

4. Lobels Catchfly.

Lychnis floribus faſciculatis foliis cordatis.

The root is long, white, woody, not much divided, but furniſhed with many fibres.

The firſt leaves are broad and ſhort: they riſe without footſtalks, and they are few, and quickly fade.

The ſtalk is round, upright, firm, and jointed: it is a foot and half high, and is of a bluiſh green colour, except toward the ground, where it is often rediſh.

The leaves are oblong, and very broad, and thoſe toward the top of the ſtalk heart-faſhioned: they ſtand in pairs without footſtalks, and ſurround the ſtalk: they are ſmooth, undivided at the edges, and of a bluiſh green.

The ſtalks toward the tops are clammy: it is a viſcous juice, which exudates near the joints, that occaſions this; and flies often are caught in it.

The flowers are ſmall, and of a pale red; but they ſtand in ſuch large tufts at the tops of the ſtalks that they make a very conſpicuous figure.

Their cups are ſlender, long, ſtriated, and purple.

The ſeed veſſel is long, and the ſeeds are blackiſh.

It is a native of France and other warmer parts of Europe; and flowers in July.

C. Bauhine calls it *Lychnis viſcoſa purpurea latifolia lævis*. Others, *muſcipila Lobelii*. It is kept in gardens, and called *Lobel's catchfly*.

Linnæus, who ſeparates many of the *lychnis's* under the name of *ſilene*, places this among that number. Others have called it *Centaurium adulterinum*.

5. Narrow-leaved branched clammy Campion.

Lychnis anguſtifolia viſcoſa ramoſa.

The root is oblong, thick, divided into a few parts, and furniſhed with ſome large fibres: it is of a bluiſh colour, and rough ſurface.

The firſt leaves are long, narrow, and of a duſky green, often in part red: they have no footſtalks, and they ſtand in a thick tuft.

The ſtalk riſes in the centre of this tuft, and is round, ſlender, upright, hollow, very much branched, jointed, and a foot and half high: the joints are diſtant, and the ſtalk is clammy toward the top.

The leaves ſtand in pairs, and reſemble thoſe from the root: they are oblong, narrow, undivided, and ſharp pointed: they are broadeſt in the middle, of a deep green colour, and of a fleſhy ſubſtance.

The flowers ſtand at the tops of the ſtalks, and of the numerous branches: they are ſmall, and of a pale red, and have ſtriated cups: they ſtand on ſlender footſtalks, and the petals are deeply divided at the ends.

It is a native of Spain, and other warmer parts of Europe; and flowers in July.

C. Bauhine calls it *Lychnis viſcoſa rubra altera ſylveſtris*. Others, *Muſcipila vulgaris*; and ſome of the Engliſh writers, *Limewort*.

6. Shrubby Campion.

Lychnis frut ſcens.

The root is long, thick, not at all divided, but furniſhed with many long fibres.

The firſt leaves are oblong, broad, undivided at the edges, pointed at the ends, and of a greyiſh green.

The ſtalks are numerous, hard, and woody, but brittle, and ſhort: they are irregularly jointed, and are not more than ten inches in length.

The leaves ſtand in pairs, and are broad, ſhort, and without footſtalks: they are undivided at the edges, and ſharp-pointed; and of a pale green.

The flowers are ſmall, and of a pale fleſh colour, often white: the cups are ſtriated and whitiſh.

The ſeed-veſſel is oblong, and the ſeeds are numerous and ſmall.

It is a native of Italy, and flowers in July.

C. Bauhine calls it *Lychnis fruteſcens myrtifolia Been allo ſimilis*. Cluſius, *Ocymoidis arboreum ſempervirens*. Others, *Lychnis fruticoſa*.

7. Campion with greeniſh yellow flowers.

Lychnis floribus flavo vireſcentibus.

The root is large, divided into many parts, and furniſhed with numerous fibres.

The firſt leaves are numerous, oblong, broad, and rounded toward the end, and of a pale green.

The ſtalk riſes in the centre of theſe, and is round, jointed, upright, firm, and three or four feet high: it is very much branched, and is of a greyiſh green: toward the top it is covered with a clammy ſubſtance, to which inſects, and other ſmall things, ſtick.

The leaves are placed in pairs, and are oblong, broad, not at all divided at the edges, and obtuſely pointed.

The flowers ſtand in cluſters at the tops of the branches, and are not large or conſpicuous: their colour is a greeniſh yellow: the cup is oblong and ſlender.

The ſeed-veſſel is ſmall, and the ſeeds are little and blackiſh.

It is a native of the Eaſt, and flowers in June.

C. Bauhine calls it *Lychnis auricula urſæ facie*; the leaves, before the ſtalk riſes, having very much the appearance of thoſe of ſome of the *auriculas*. Cluſius calls it *Lychnis ſylveſtris latifolia*.

8. Small-flowered Campion with bloated cups.

Lychnis floribus minoribus calyculus inflatis.

The root is long, thick, ſingle, of a blackiſh colour, and furniſhed with numerous fibres.

The firſt leaves are oblong, large, broad, and of a bluiſh green: they riſe in a vaſt tuft, and ſtand all the winter.

The ſtalks are numerous, ſtout, upright, not much jointed, and rarely at all branched; and they are three feet high.

They are covered all the way down with a clammy moiſture; ſo that flies ſtick to them.

The leaves upon the ſtalks are few and ſmall: they ſtand in pairs, and are broad, oblong, pointed, and of a pale green.

The flowers ſtand at the tops of the ſtalks in a regular and beautiful manner, and they are ſmall and yellow: they have ſwoln or bloated cups.

The ſeed-veſſel is ſmall and oblong, and the ſeeds are little and brown.

It is a native of Crete, and flowers in Auguſt.

Alpinus calls it *Viſcaria maxima Cretica*; and others borrow the name from him.

Mr. Ray, and others ſince have ſuſpected this to be the ſame plant with the preceding, from the reſemblance in ſome points; but this is owing only to the imperfect deſcriptions.

The whole habit of this ſpecies is different from that, and the form of the cups diſtinguiſhes them entirely. It is natural to make theſe miſtakes from imperfect deſcriptions: but thoſe who have ſeen the plant from the ſpot cannot be under any difficulty in determining it altogether ſeparate.

Little is known with certainty of the virtues of this numerous genus.

The *common white campion* is uſed by the country people in ſome places to make an ointment, which they commend for its virtues againſt hard ſwellings; and, elſwhere, the leaves of the ſame ſpecies, dried in an oven and powdered, are given children againſt convulſions.

In Germany they celebrate ſeveral of the common kinds as wound-herbs; and with us the *red catchfly* is ſaid to poſſeſs, in common with *ſoapwort*, a virtue of diſperſing grumous blood, and of relieving in bruiſes external and internal.

The *cockle* is celebrated alſo as a wound-herb, but on a different principle. It is ſaid to have great virtue in ſtopping blood and healing freſh cuts.

It is alſo uſed againſt cutaneous foulneſſes in ſome places, in form of a decoction to waſh the parts, or in an ointment.

The root of this ſpecies, dried and powdered, ſtands recommended alſo greatly againſt hæmorrhages, and ſeems worth a trial: the doſe ſhould be about fifteen grains.

GENUS III.

CISTUS.

HEATH SUNFLOWER.

THE flower is large and ſpecious; and conſiſts of five broad regularly expanded petals: the cup is compoſed of five leaves; of theſe two are ſmaller than the other three; and it remains with the ſeed-veſſel: this is of a roundiſh ſhape, and contains numerous ſmall and roundiſh ſeeds.

Linnæus places this among his *polyandria monogynia*; the filaments in the flower being numerous, and growing to the receptacle; and the ſtyle from the rudiment of the fruit being ſingle.

Many authors have diſtinguiſhed two genera among the plants properly belonging to this, calling the one *helianthemum* and *chamæciſtus*, and the other *ciſtus*; but there is not in nature any certain and ſufficient foundation for this diſtinction; and it is more proper to keep the plants all together, as they evidently agree in the ſeveral characters which are proper to eſtabliſh a genus.

Our Engliſh names of *heath ſunflower* and *dwarf ciſtus* are preſerved in ſome writers for the common wild kinds with us; but in general the Latin name of the genus, *ciſtus*, has got into common uſe, and has ſuperſeded all the Engliſh ones.

DIVISION I. BRITISH SPECIES.

1. Common ſmall Ciſtus.

Ciſtus procumbens lignoſus.

The root is long, ſlender, divided into many parts, and furniſhed with numerous long, tough, brown, and crooked fibres.

The ſtalks are very numerous: they riſe all from one head of the root, and ſpread themſelves every way, ſo as to form a great roundiſh tuft.

They are brown, hard, woody, and are a foot or more in length; but they, for the moſt part, trail upon the ground: they are frequently branched, and of a brown colour.

The leaves are oblong and broad: they are of a duſky green: they ſtand in pairs, and are placed very thick upon all parts of the ſtalks: they frequently are turned back, and they have a light hairyneſs.

The flowers are large, beautiful, and of a gold yellow: they ſtand on naked, ſtraggling, and crooked ſhoots that run up from the tops of the ſtalks, and each has its ſeparate, ſlender pedicle: they quickly fall off.

The ſeed-veſſel is of a roundiſh form, and the ſeeds are numerous, ſmall, and brown.

It is common on heaths, and by road-ſides, in many parts of England; and flowers in July.

C. Bauhine calls it *Chamæciſtus vulgaris flore luteo.* Others, *Helianthemum vulgare.* The Engliſh writers, *Dwarf ciſtus*, or *Sunflower.*

2. Ciſtus with narrow petals.

Ciſtus procumbens petalis anguſtis.

The root is long, ſlender, brown, woody, and divided into many long, crooked parts.

The ſtalks are numerous, ſlender, woody, and trailing.

The leaves ſtand in pairs, and they are oblong, a little hairy, of a pale green on the underſide, and of a deep green above; and they are obtuſe at the ends.

The flowers ſtand ſingly upon ſlender twigs riſing from the tops of the ſtalks: they are large, and of a gold yellow, and are compoſed of very narrow petals.

The ſeed-veſſel is roundiſh, and the ſeeds are ſmall.

It is a native of our heaths, particularly of Surry; and flowers in Auguſt.

Ray calls it *Heliantbemum vulgare petalis florum peranguſtis*: it retains this difference when raiſed from ſeed.

3. Hoary Dwarf Ciſtus.

Ciſtus pumilus pubeſcens.

The root is long, brown, ſlender, and divided.

The ſtalks are numerous, firm, woody, and ſhort: ſome of them trail upon the ground, and others riſe up; but they are rarely more than three or four inches high: they are of a whitiſh colour, and ſomewhat hairy.

The leaves ſtand in pairs, and they are oblong, broad, and of a greyiſh colour, whiter on the under part than the upper, and covered with a rough hoaryneſs.

The flowers are large and yellow: they ſtand at the tops of the upright ſtalks, and their bright colour, with the contraſt of the white of the ſtalks and leaves, has a very pretty effect.

The ſeed-veſſel is oblong, and ſomewhat broad; and the ſeeds are numerous and ſmall.

It is found in many parts of the northern counties, and flowers in July.

J. Bauhine calls it *Heliantbemum alpinum folio piloſellæ minoris Fuchſii.*

4. Dwarf Ciſtus with polcymountain leaves.

Ciſtus humilis polii foliis.

The root is long, ſlender, divided into ſeveral parts, and hung with tough fibres.

The ſtalks are many, firm, erect, woody, and very much branched.

The leaves ſtand in pairs, and they are very numerous; the young ſhoots are ſo covered with them that no part of the ſtalk is to be ſeen; on the other and larger ſtalks they are placed at ſomewhat greater diſtances.

They are long, narrow, and have no foot ſtalks: they are undivided at the edges, pointed at the ends, and of a pale greyiſh colour.

The flowers ſtand on ſlender twigs riſing from the upper parts of branches; and they are large, and of a gold yellow.

The ſeed-veſſel is roundiſh and ſmall; and the ſeeds are very ſmall.

It is found on ſome of our heaths, but is not common.

Ray calls it *Chamæciſtus montanus polii folio.*

5. Ciſtus with ſpotted flowers.

Ciſtus flore guttato.

The root is ſmall, ſlender, hard, oblong, undivided, and furniſhed with a few fibres.

The firſt leaves are ſhort, broad, of a faint green, ſomewhat hairy, and not at all divided at the edges.

The ſtalk is round, upright, of a pale green, lightly hairy, and not at all branched, till near the top, where there riſe ſeveral ſhoots from the boſoms of the leaves for the ſupport of the flowers.

The leaves are ſhort, oblong, conſiderably broad, and of a duſky green: they ſtand in pairs: they are undivided at the edges, and pointed at the end, and a little hairy.

The flowers are very large and beautiful: they ſtand on long footſtalks, and are of a pale yellow; but there is on each petal a fine ſpot, of a blood red.

The ſeed-veſſel is ſhort and ſwelled: the ſeeds are numerous and ſmall.

It is a native of Scotland, but not common. It flowers in July.

C. Bauhine calls it *Ciſtus flore pallido punicante macula inſigniti.*

It is an annual plant, and ſeldom riſes to more than a foot in height, often it is not above eight inches.

The ſeveral ſpecies of Engliſh *ciſtus* have all the ſame virtues; but the moſt common kind, here firſt deſcribed, poſſeſſes them in the greateſt degree. As the plant reſembles the *lychnis* in its characters, it does alſo in its qualities, but it poſſeſſes them in a more eminent manner.

The roots of the *common ciſtus*, dried and powdered, are an excellent aſtringent: they may be given in diarrhœas attended with bloody ſtools, a ſcruple for a doſe, with great ſafety and ſucceſs.

The expreſſed juice of the leaves bruiſed with red Port-wine is good againſt ſpitting of blood.

The Germans eſteem it one of the moſt eminent of their wound-herbs, and call it *golden conſound.*

A decoction made with equal parts of the *ciſtus* roots and *comfrey*, and taken for a continuance of time, has been found excellent in the fluor albus.

DIVISION II. FOREIGN SPECIES.

1. White Ciſtus with narrow leaves.

Ciſtus albus foliis anguſtis ſubtus biſulcatis incanis.

The root is long, ſlender, brown, and furniſhed with many long, and tough fibres.

The ſtalks are numerous, woody, ſlender, and branched.

They partly lie upon the ground, and partly raiſe themſelves up: they are from eight inches to more than a foot in length, and are very thick ſet with leaves.

Theſe ſtand in pairs, and are oblong, very narrow, furrowed doubly on the lower ſide, and a little hoary.

The flowers ſtand, in the manner of thoſe of our common *Ciſtus*, on weak, ſlender twigs, and they are large and white.

The ſeed-veſſel is roundiſh, and the ſeeds are numerous, ſmall, and brown.

It

It is a native of France, and flowers in June

C. Bauhine calls it *Chamæciſtus foliis thymi incanis*; but this is not a good name, for the leaves are longer and narrower than thoſe of thyme.

2. Short-leaved white Ciſtus.

Ciſtus flore albo foliis lanceolatis.

The root is long, tough, ſpreading, and full of thick fibres.

The ſtalks are numerous, firm, woody, and moſt of them ſtand erect.

The leaves are not ſo numerous as on the common kinds: they ſtand in pairs at diſtances, and are ſmall, ſhort, of a figure approaching to oval, and ſharp-pointed: their colour is a yellowiſh green, and they are a little hairy.

The flowers ſtand at the tops of the ſtalks, and are large and white.

The ſeed-veſſel is roundiſh, and the ſeeds are numerous, and of a duſky colour.

This is common in many parts of Germany, and flowers in July.

Tabernamontanus calls it *Helianthemum album Germanicum*; and moſt of the later writers have copied from him in this reſpect.

3. Broad-leaved ſhrub Ciſtus.

Ciſtus fruteſcens foliis latis.

The root is large and ſpreading.

The ſtem is woody, and covered with a brown bark: it grows to the height of three or four feet, and is very much branched.

The leaves are numerous, large, and beautiful: they ſtand in pairs, and they have long footſtalks: they are of a dead green in ſummer, and toward autumn they commonly grow rediſh: they are of a firm ſubſtance, and of a gloſſy ſurface: their ſhape is like that of a heart, but that they run out into a longer point.

The flowers ſtand in little cluſters on ſtalks riſing from the boſoms of the upper leaves: they are large, beautiful, and white.

The ſeed-veſſel is ſmall and pointed; and the ſeeds are numerous and minute.

It is a native of Spain and Portugal; and flowers in Auguſt.

The tops of the young ſhoots have a fine fragrant aromatick ſmell: but this goes off when the leaves harden.

C. Bauhine calls it *Ciſtus ledon foliis populi nigræ major.* Cluſius, *Ciſtus ledum latifolium ſecundum majus.*

4. Narrow-leaved tree Ciſtus.

Ciſtus arboreſcens anguſtifolius.

This is a very elegant ſpecies.

The root is large and ſpreading: the ſtem is thick, woody, and branched: it grows to five or ſix feet in height, and uſually with a beautiful regularity.

The leaves are very numerous: they ſtand in pairs, and are long, narrow, and ſharp pointed: they are at firſt of a pale green, afterwards of a deeper green, and uſually toward the end of ſummer purpliſh.

The flowers grow on the tops of the branches, and are very large and beautiful: they are as big as our wild roſe, and white; but the buttons on the numerous threads in the centre are yellow; and every petal has a dark, large ſpot toward the baſe.

The ſeed-veſſel is large, but the ſeeds are ſmall: they are roundiſh, and of a duſky brown.

The young ſhoots of this plant are for the moſt part of ſummer covered with a purple, reſinous, and fragrant juice, and may be ſmelt at a great diſtance.

It is a native of Spain, and flowers in July.

C. Bauhine calls it *Ciſtus ladaniſera hiſpanica incana.* Cluſius, *Ciſtus ledan primus anguſtifolius.* The leaves are ſometimes hoary, ſometimes ſmooth; and they are not unfrequently curled at the edges: hence, ſome have idly made diſtinctions of three different ſpecies of it.

5. Narrow-leaved, ſmall-flowered, ſhrub Ciſtus.

Ciſtus anguſtifolius floribus minoribus.

The root is long, thick, ſpreading, woody, and covered with a brown bark.

The ſtem is thick, firm, woody, and four feet high: its bark is purpliſh, and it is divided into numerous branches.

The leaves ſtand in pairs, and they are long and very narrow, a little hairy, of a pale green colour, and marked with three large ribs.

The flowers ſtand on long, ſlender footſtalks, at the tops of the branches.

They are called ſmall, in compariſon of thoſe of the former ſpecies; but they are large enough, and very beautiful: they are of a pure white, and they have gold yellow buttons on their numerous threads in the centre.

The ſeed-veſſels are ſmall, and are preſerved in a hairy cup.

The young ſhoots of this kind are very fragrant.

It is a native of the ſouth of France; and flowers in Auguſt.

C. Bauhine calls it *Ciſtus ladanifera Monſpelienſium.* Cluſius calls it *Ciſtus ledon quintus*; and others diſtinguiſh it by his name.

6. Common ſmall Ciſtus.

Ciſtus arboreus foliis ovatis hirſutus.

The root is large, woody, ſpreading, and divided: the ſtem is thick, woody, upright, branched, and three feet high: the bark is of a deep purple, and the twigs are ſlender: ſometimes the whole plant is erect; ſometimes the greateſt part of the ſtalks lie upon the ground.

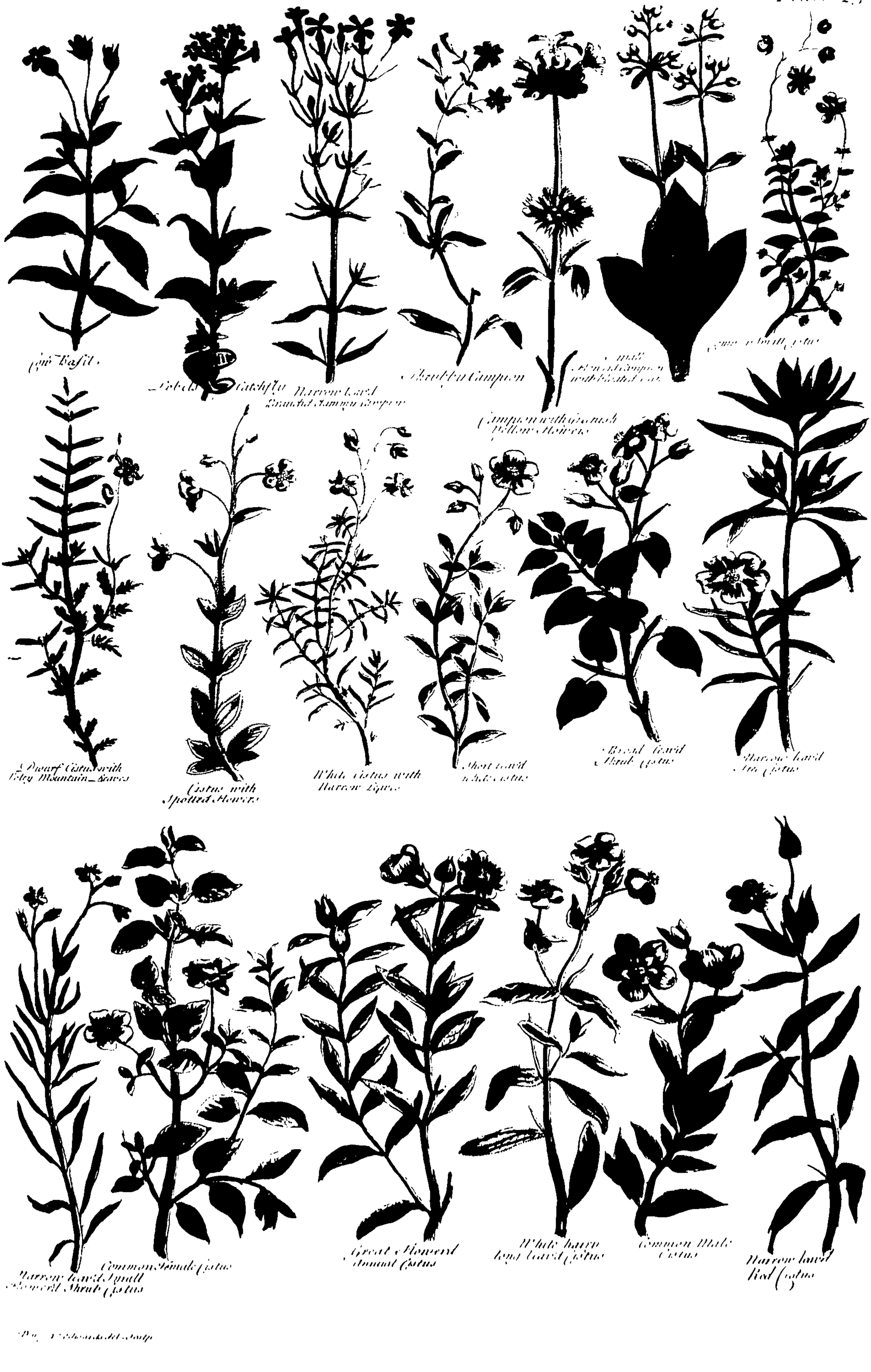
The leaves are ſhort, broad, and of an oval figure: they ſtand in pairs: they have long footſtalks; and they are of a pale greyiſh green, and hairy both on the upper and underſide.

The flowers are very large and beautiful: they ſtand on long footſtalks riſing from the boſoms of the leaves; and they are white, ſometimes with veins of yellowiſh, and ſometimes with a tinge of yellow throughout.

The ſeed-veſſel is roundiſh, large, pointed, and a little flatted; and the ſeeds are large.

It is a native of Italy, and other warmer parts of Europe.

C. Bau-



Sweet Basil

Narrow Leaved Stinking Chamæ Cistus

Broad Leaved Stinking Chamæ Cistus

Sage Leaved Cistus

Marsh Cistus with Narrow Leaves

Dwarf Cistus with Ivy Leaves

Cistus with Spotted Flowers

White Cistus with Narrow Leaves

Short Leaved White Cistus

Broad Leaved Shrub Cistus

Narrow Leaved Shrub Cistus

Common Female Cistus

Narrow Leaved Small Shrubby Cistus

Great Flowered Annual Cistus

White Narrow Leaved Cistus

Common Male Cistus

Narrow Leaved Red Cistus

C. Bauhine calls it *Ciſtus fœmina folio ſalvi.e.* Others, *Ciſtus fœmina.* Our gardeners, *Female ciſtus.*

7. Great flowered annual Ciſtus.

Ciſtus annuus flore magno.

The root is ſlender, long, and inconſiderable.

The firſt leaves are oblong, broad, and obtuſe; of a pale green, and hairy.

The ſtalk is ſingle, round, erect, firm, and a foot and half high: it is hairy, and of a pale green.

The leaves ſtand in pairs at conſiderable diſtances: they are oblong, broad, and blunt, of a pale green, and hairy.

The flowers ſtand at the tops of the ſtalks, and in the boſoms of the leaves: they are large and white.

The ſeed-veſſel is large, as are alſo the ſeeds.

It is a native of Spain and Portugal. This is the only herbaceous *ciſtus* that approaches to the form of the ſhrubby kinds; but it agrees ſo well with them as to ſhew that all efforts to ſeparate the *ſhrubby* and *dwarf ciſtus* into two genera muſt be fruitleſs.

C. Bauhine calls it *Ciſtus folio ſalicis.*

8. White hairy long-leaved Ciſtus.

Ciſtus fruteſcens albicans foliis oblongis hirſutis.

The root is large and ſpreading.

The ſtems are numerous, woody, but weak; three or four feet long, but generally procumbent, and covered with a pale bark: the young twigs are very long and ſlender, and they are of a whitiſh colour.

The leaves ſtand in pairs: they are oblong and narrow; of a greyiſh green, and hairy.

The flowers ſtand at the tops of the branches; and they are large and white.

The ſeed-veſſels are large, as are alſo the ſeeds.

It is a native of Spain, and flowers in July.

The young ſhoots of this ſpecies are covered with a fine balſamick fragrant reſin.

C. Bauhine calls it *Ciſtus ledon hirſutum.* Cluſius, *Ciſtus ledon quartus.* Others, *Ciſtus mas hirſutus.*

9. Common male Ciſtus.

Ciſtus flore magno rubente.

The root is large, ſpreading, and woody.

The ſtem is woody, firm, upright, branched, and four feet high: the branches are thick ſet with leaves, and their bark is of a pale brown.

The leaves are oblong, but of a conſiderable breadth: they ſtand in pairs without any footſtalks, and they are broadeſt toward the baſe, whence they diminiſh to a point; and are of a greyiſh green colour, and covered with a woolly matter: they are very ſoft and tender on the young ſhoots, but hard and rigid on ſuch as are older.

The flowers ſtand on ſlender footſtalks at the upper part of the branches, and are very large, and red.

The ſeed-veſſel is roundiſh, and angulated; and the ſeeds are large.

It is common in Italy, and flowers in July.

C. Bauhine calls it *Ciſtus mas folio oblongo incano.* Our gardeners, *Male ciſtus.*

The plant called *hypociſtis*, to be deſcribed hereafter in its proper place, grows to the roots of this ſpecies, in the ſame manner as the broom-rape grows to the roots of broom in our hilly, barren paſtures.

10. Narrow-leaved red Ciſtus.

Ciſtus flore rubro magno anguſtifolius.

The root is woody and ſpreading.

The ſtem is thick, woody, branched, and four feet high: the bark is of a pale colour, and the wood is brittle.

The leaves ſtand in pairs, and are very numerous: they are long, narrow, and of a pale green; ſomewhat hairy, but not woolly, as thoſe of the other ſpecies.

The flowers ſtand on long footſtalks riſing from the boſoms of the leaves, and are very large, and of a beautiful red.

The ſeed-veſſels are large and ribbed; and the ſeeds are large.

C. Bauhine calls this *Ciſtus mas folio oblongo incano.*

It is frequent in the warmer parts of Europe, and common in our gardens.

Ray ſuſpected this to be only a variety of the preceding ſpecies, but erroneouſly.

GENUS IV.

SAINT JOHN'S WORT.

HYPERICUM.

THE flower conſiſts of five petals, which are equal in ſize, regularly placed, and expanded: the ſeed-veſſel is roundiſh, and the ſeeds are numerous: the cup is divided into five, oval, pointed ſegments, and remains when the flower is fallen.

Linnæus places this among the *polyadelphia polyandria*; the threads in the flower being divided into ſeveral diſtinct ſets, growing together at their baſes, and growing to the receptacle.

The ſtyles, which in the reſt of this author's method make a conſiderable part of the claſſical character, are here not mentioned; for this plain reaſon, that their number is too uncertain to be determined. In ſome ſpecies of this plant there are two, in others three, in others five, and in ſome but one.

This ſingle inſtance may ſerve as a proof that the ſtyles are not at all fit to be received into the number of parts from which a claſſical diviſion, or even a generical character, can be eſtabliſhed: if we ſhould allow them but this laſt and leaſt uſe, we muſt here of neceſſity ſeparate, under different names, and in diſtinct genera, plants moſt evidently related to one another, as ſpecies of the ſame genus.

Some have obſerved theſe, or other, as light and uncertain diſtinctions, ſo far as to ſeparate the *Saint John's worts* in this manner: hence have ariſen the diſtinct generical names in Latin of *hypericum*, *aſcyrum*, *androſæmum*, and ſome others; and in Engliſh, thoſe of *tutſan*, *Saint Peter's wort*, and *Saint John's wort*; all trivolous and idle diſtinctions, and all tending to create confuſion in the ſcience; becauſe the plants are all truly and properly allied.

Linnæus, who is in general fond enough of eſtabliſhing new genera, has judged very rightly in this reſpect: he has named all theſe ſubordinate and accidental variations in the ſtyles of the various kinds of *Saint John's wort* as variations only; and has boldly and juſtly kept all of them under one name, and in one genus. At the ſame time, he has ſeparated, under the name of *aſcyrum*, and referred to a diſtinct genus, ſome plants, which, though they have the general aſpect of *Saint John's wort*, have only four petals in the flower.

While we give this author the deſerved praiſe, for his arrangement of the *Saint John's worts*, we cannot but cenſure the place he has aſſigned them in his work: he has ſeparated them from the ciſtus, and other plants before deſcribed, by five intermediate claſſes; and, becauſe of this accident of the *ſtamina*, or threads, joining in ſeveral little cluſters, has placed them in the artificial claſs we have named. This may well be called an artificial claſs, becauſe nothing in nature countenances it; and it is moſt evident, by the diviſion of theſe plants from the others, that it violates her moſt obvious laws. They agree with the others in the having a flower compoſed of five petals, and their ſeeds contained in a ſingle capſule: theſe are obvious reaſons for joining them; and this particular diſtribution of the ſtamina is but a very poor one for ſeparating them, and ſending the ſtudent to look for plants which nature directs him to underſtand as allied to one another, in the different parts of a work.

DIVISION I. BRITISH SPECIES.

1. Common Saint John's wort.

Hypericum vulgare.

The root is long, ſlender, woody, divided, and ſpreading.

The ſtalk is firm, upright, of a pale green colour, edged, and a foot and half high: it is ſimple toward the bottom, but divides into many branches near the top.

The leaves are oblong, broad, and of a deep green: they ſtand in pairs at ſmall diſtances, and are undivided on the edges: when held up againſt the light they appear full of little holes.

The flowers are large, full of threads, and of a beautiful gold yellow.

The ſeed-veſſel is roundiſh, and contains numerous ſmall ſeeds.

The ſtyles from the rudiment of the capſule are three in this plant; and the capſule is divided into three cells.

The yellow threads in this flower, when moiſtened and bruiſed upon the hand, ſtain it red.

It is common by way-ſides, and flowers in June.

C. Bauhine calls it *Hypericum vulgare*; and moſt others have followed him.

The *common Saint John's wort* is celebrated for many virtues, and is not neglected in regular practice. A decoction of it is good to waſh ulcers; and an oil, made by infuſing the flowers in olive oil, is much recommended againſt pain, and as a balſam: the flowers give their latent red colour very beautifully to the oil in this preparation.

An infuſion of the freſh tops of *Saint John's wort* is good in the jaundice: it operates by urine.

The expreſſed juice of the freſh tops is good againſt ſpitting of blood.

The powder of the tops carefully dried is recommended alſo againſt worms, and in the gout, and againſt tertian and quartan agues.

A tincture of the flowers, made ſtrong in white-wine, is recommended greatly by ſome againſt melancholy: but of theſe qualities we ſpeak with leſs certainty, though they deſerve a fair trial.

2. Small heart-leaved Saint John's wort.

Hypericum folium cordatis.

The root is ſlender, brown, and furniſhed with a few fibres.

The ſtalk is round, ſmooth, upright, and frequently rediſh: it has ſcarce any branches, and is a foot or more in height.

The leaves ſtand in pairs, but with great ſpaces between one pair and another: they are ſmall, broad, ſhort, and have no footſtalks, but ſurround the ſtalk at the baſe: they are of a heart-faſhioned ſhape, but not much dented at the broad part; and are of a deep green, and firm ſubſtance.

The flowers are large, and of a bright yellow.

The ſeed-veſſels are large, and the ſeeds are browniſh.

The ſtyles in the flowers of this ſpecies are only three; and the ſeed-veſſel is, in the ſame manner, divided into three cells.

It is common in dry paſtures and by way-ſides; and flowers in July.

It is a very pretty plant. Tragus has called it thence *Hypericum pulchrum*; and moſt have copied him. J. Bauhine calls it *Hypericum minus erectum*.

3. Small

3. Small procumbent Saint John's wort.

Hypericum procumbens minus.

The root is ſlender, long, and woody.

The ſtalks are numerous, and ſome of them lie upon the ground; others riſe tolerably upright: they are four or five inches high, and edged like thoſe of the *common Saint John's wort*, and of a yellowiſh colour.

The leaves ſtand in pairs, at moderate diſtances one pair from another; and they are ſmall, oblong, pointed, and of a faint green.

The flowers are large, and of a bright yellow: they grow on the tops of the ſtalks, and of their branches and diviſions.

The ſeed-veſſel is ſmall, and the ſeeds are numerous and minute.

The ſtyles in the flower of this ſpecies are three, and the ſeed-veſſel is divided into three cells.

It is common in barren paſtures, and flowers in July.

C. Bauhine calls it *Hypericum minus ſupinum, ſive ſupinum glabrum.* We, *Trailing Saint John's wort.*

4. Broad-leaved hairy Saint John's wort.

Hypericum erectum latifolium hirſutum.

The root is long, large, woody, and ſpreading.

The ſtalk is thick, firm, upright, very little branched, and of a browniſh colour.

The leaves ſtand in pairs; and they are large, oblong, and of a browniſh green, and hairy: they are broadeſt toward the baſe, and diminiſh to a point, and they have ſhort footſtalks.

The flowers are numerous, large, and of a pale yellow: they ſtand at the tops of the ſtalks, and have ſlender pedicles.

The ſeed-veſſel is large, and the ſeeds are brown.

The ſtyles are three in the flower of this ſpecies, and the ſeed-veſſel is accordingly divided into three cells.

It is common by road ſides, and flowers in Auguſt.

C. Bauhine calls it *Androſæmum hirſutum*, and J. Bauhine, *Hypericum androſæmum dictum.* Theſe are very improper names, for there is another ſpecies altogether different from this, properly called *tutſan* and *androſæmum*, to be deſcribed hereafter.

5. Broad-leaved, ſmooth Saint John's wort.

Hypericum latifolium glabrum.

The root is long, divided, crooked, hard, and reddiſh.

The ſtalk is upright, ſingle, not at all branched or divided, and a foot and a half high, and of a pale, bluiſh-green colour.

The leaves ſtand in pairs at conſiderable diſtances; they are very large and broad; they have no footſtalks, their baſes join at the ſtalk, and they are of a pale bluiſh green.

The flowers ſtand at the tops of the ſtalks on ſlender pedicles: they are large, and of a very beautiful yellow.

The ſeed-veſſel alſo is large, and the ſeeds are ſmall and brown.

The ſtyles in the flower of this ſpecies are three, and the ſeed-veſſel is accordingly divided into three cells.

It is not common in England, except in the northern counties; but there are ſome plants of it in Charlton wood, near Woolwich.

It flowers in Auguſt.

C. Bauhine calls it *Aſyron, ſive hypericum bifolium glabrum non perforatum.* Columna, *Androſæmum campoclarente.* It is an extremely beautiful plant.

Linnæus makes this and the former ſpecies only varieties of the ſame plant. He muſt have been miſled by the bad figures of authors; for it is impoſſible he ſhould have ſaid this, if he had ever ſeen this ſpecies: the other is common.

The leaves in this ſpecies are not full of holes, as in the *common Saint John's wort*; but frequently the underſide of them is beautifully dotted with red ſpots, diſpoſed regularly on the edge.

6. Tutſan.

Hypericum maximum androſæmum dictum.

The root is hard, woody, long, reddiſh, and divided into many parts.

The ſtalks are numerous, firm, hard, of a pale green, and edged: they are two feet and a half high, and frequently are branched, though ſometimes they riſe almoſt ſingle.

The leaves ſtand in pairs, and are very large: they are broadeſt at the baſe, and terminate obtuſely: their colour is a dead green in the firſt part of ſummer, but frequently the whole plant turns of a blood-red toward autumn.

The flowers ſtand in cluſters at the tops of the ſtalks: they are large and yellow.

The ſeed-veſſel is of an oval form; and, being ſoft and juicy, has the appearance of a berry.

It is frequent in many parts of England under ſhady hedges, and flowers in Auguſt.

C. Bauhine calls it *Androſæmum maximum fruteſcens.* Ray, *Hypericum maximum androſæmum vulgare dictum.*

This ſpecies poſſeſſes the virtue of a vulnerary in a degree even ſuperior to the *common Saint John's wort.* One of the young leaves wrapped round a cut-finger, or ſpread evenly over a deep freſh wound, will cure it without any other application.

This I am aſſured by the Lady of Gen. Oglethorpe, from her repeated experience.

7. Saint Peter's wort.

Hypericum caule erecto quadrangulo aſyron dictum.

The root is long and ſpreading: it creeps under the ſurface, and has a multitude of fibres.

The ſtalks are numerous, ſquare, upright, ſeldom at all branched, and about a foot high.

The leaves are placed in pairs at conſiderable diſtances, and have no footſtalks: they are of an oval figure, and obtuſe.

The flowers ſtand at the tops of the ſtalks, on ſeparate, ſlender pedicles, and are of a bright yellow.

The ſeed-veſſels are large, and the ſeeds minute.

The

The ſtyles in the flower of this plant are three, and the ſeed-veſſel is accordingly divided into three cells.

It is common in damp places, and flowers in June.

J. Bauhine calls it *Hypericum aſcyrum dictum caule quadrangulo.* Others, *Aſcyrum*, and *Aſcyron vulgare.*

Its virtues are the ſame with thoſe of *Saint John's wort.*

8. Woolly Marſh Saint John's wort.

Hypericum ſupinum villoſum paluſtre.

This is commonly called a ſpecies of *Saint Peter's wort*; but I have obſerved before, that the diſtinction of that as a genus is idle, and not ſupported in nature.

The root is ſmall, and ſpreading.

The ſtalks are numerous, weak, and procumbent: they are of a whitiſh colour, and are ten inches or a foot long.

The leaves are placed in pairs, and they are of a roundiſh figure: they are ſoft to the touch, white, and covered with a woolly down.

The flowers ſtand on ſlender footſtalks at the tops of the ſtalks, and riſe from the boſoms of the upper leaves; and they are large, and of a beautiful yellow.

The ſeed-veſſels are roundiſh, and the ſeeds minute and brown.

It is not uncommon on rotten, wet, and boggy ground, and flowers in July.

C. Bauhine calls it *Aſcyron ſupinum villoſum paluſtre.*

DIVISION II. FOREIGN SPECIES.

1. Spaniſh Saint John's wort.

Hypericum tomentoſum calycibus ſerratis.

The root is long, ſlender, brown, and hung with a few fibres.

The ſtalks are numerous, weak, rediſh, and ſeven or eight inches long: they trail upon the ground, and are not branched.

The leaves are placed in pairs: they are of an oval ſhape, approaching to heart-faſhioned, of a greyiſh white colour, and very hoary.

The flowers are numerous and ſmall: they ſtand on long and very ſlender pedicles riſing from the tops of the ſtalks, ten or a dozen together, and they are of a bright yellow: their cup is ſerrated, and glandulous.

The ſeed-veſſel is large, and the ſeeds are very ſmall and brown.

This ſpecies has three ſtyles in the flower, and the capſule is divided into three cells.

It is a native of Spain, and flowers in Auguſt.

C. Bauhine calls it *Hypericum ſupinum tomentoſum*; but he erroneouſly makes two ſpecies of it, a greater and a leſſer. He had ſeen it larger in Spain, and ſmaller in France; but there was no other difference.

2. Perfoliate Saint John's wort.

Hypericum perfoliatum.

The root is compoſed of a number of thick, black fibres.

The ſtalk is round, upright, firm, and a foot and a half high: it is uſually red toward the bottom, and elſewhere of a pale green.

The leaves are broad, and of a ſhape approaching to triangular: they meet at the baſe, and the ſtalk ſeems to paſs through them: the ſeveral pairs are placed at diſtances with great regularity: they are of a deep green, and of a firm ſubſtance; and, when held up to the light, they are found full of holes, in the manner of the *common Saint John's wort*; toward the bottom the leaves are ſmall; they are largeſt about the middle of the ſtalk, and grow ſmaller again to the top.

The flowers ſtand on long footſtalks at the top of the plant; and they are large, and of a beautiful yellow.

The ſeed-veſſel is oval, and the ſeeds are minute and brown.

This ſpecies has three ſtyles in the flower, and the cells of the ſeed-veſſel are three.

It is a native of Italy, and flowers in July.

C. Bauhine calls it *Androſæmum perforatum & perfoliatum.* Columna, *Androſæmum alterum apulum.*

3. Cluſtered-leaved Saint John's wort.

Hypericum foliis numeroſis.

The root is long, thick, and furniſhed with numerous fibres.

The ſtalks are hard, woody, upright, and very thick ſet with leaves: they are of a rediſh colour toward the bottom, and of a pale green toward the top.

The leaves are oblong, and very narrow: they do not grow in regular pairs, as in the other ſpecies of *Saint John's wort*, but ſeem to ſurround the ſtalk as thoſe of the ſtellate plants, like the rays of a ſtar: however, they uſually grow three together, and the reſt are young ſhoots from the boſoms of theſe.

The flowers are large, and of a beautiful yellow: they ſtand at the tops of the ſtalks, on ſmall, ſlender pedicles.

The ſeed-veſſel is large and oval, and the ſeeds are ſmall and brown.

This ſpecies has three ſtyles in the flower, and the ſeed-veſſel has three cells.

It is a native of Italy, and flowers in June.

C. Bauhine calls it *Hypericoides coris quibuſdam.* Others, *Coris lutea*, and *Coris Mathioli.* Our people call it *Heath Pine*, and *Low Pine*, ſometimes *Coris.*

4. Moneywort leaved Saint John's wort.

Hypericum nummulariæ foliis.

The root is ſmall, oblong, crooked, rediſh, and furniſhed with many fibres.

The ſtalks are numerous, weak, and rediſh: they

they are five or ſix inches long, and for the moſt part trail or lie upon the ground.

The leaves ſtand in pairs, and are of a roundiſh figure, not unlike thoſe of moneywort, but ſmaller.

The flowers are very large and beautiful: they are numerous; they ſtand on ſlender footſtalks at the top of the ſeveral ſtalks, and are of a bright yellow; and their ſeveral petals, as well as the ſegments of the cup, are ſerrated.

The ſeed-veſſel is large, and the ſeeds are ſmall and brown.

The ſtyles in the flower of this ſpecies are three, and the cells are three in the capſule.

It is an extremely elegant ſpecies.

It is a native of the Pyrenæan mountains, where it hangs among the wet rocks. It flowers in July.

C. Bauhine calls it *Hypericum nummulariæ folio*; and others have for the moſt part followed him, the leaves ſpeaking the reſemblance.

5. Little heath-leaved Saint John's wort.

Hypericum parvum ericoides.

This is an extremely ſingular and pretty little plant.

The root is long, ſlender, rediſh, and has many fibres: they are numerous, weak, and very ſmall: they are crowned with leaves, and they ſend out many ſhort and ſlender branches.

The leaves are narrow, longiſh, and harſh to the touch: their colour is a duſky green, and they entirely cover the lower parts of the ſtalks.

The top of each ſtalk is naked, or, in other words, there riſe from the extremities of theſe leafy ſtalks ſlender twigs which ſupport the flowers.

Theſe are numerous, ſmall, and of a pale yellow.

The ſeed-veſſel is longiſh and ſmall; and the ſeeds are very minute, and brown.

There are three ſtyles in the flower, and three cells in the capſule.

It is a native of Spain and Portugal; and flowers in autumn.

Plukenet calls it *Hypericum ericoides minimum foliis cinereis.*

6. Large-floweerd Saint John's wort.

Hypericum flore magno.

The root is long, ſlender, divided into ſeveral parts, and furniſhed with many long fibres.

The ſtalks are numerous, upright, brown, hard, and bitter: they are a foot high, and rarely are at all branched.

The leaves are placed in pairs, and they ſtand at ſmall diſtances one pair from another.

They are of a firm ſubſtance and deep green colour, and of an oval ſhape; broadeſt at the bottom, where they adhere without footſtalks; and ſmaller to the end, where they terminate obtuſely.

The flowers are very large and beautiful: they are of a fine yellow, and they ſtand in conſiderable numbers on the tops of the ſtalks.

The ſeed-veſſel is round, and the ſeeds are ſmall and brown.

The ſtyles are three in this flower; and the cells three in the capſule.

It is a native of the Eaſt, and flowers in July.

C. Bauhine calls it *Aſcyrum magno flore.* Wheeler, *Hypericum montis Olympi*; a name adopted by moſt others.

7. Oriental Tutſan.

Hypericum flore et theca maximis.

The root is ſlender, and ſpreads under the ſurface.

The ſtalks are numerous, weak, and a foot or more in length: they never riſe properly erect, nor do they lie upon the ground, but always ſtand ſtooping.

The leaves are placed regularly in pairs, and they are very large, of a figure reſembling thoſe of the laurel, of a pale green colour, and perfectly even at the edges.

The flowers ſtand at the tops of the ſtalk, and are very conſpicuous by their ſize; for they are as large as a roſe, and of a very beautiful yellow, and full of threads of the ſame yellow in the centre.

The ſeed-veſſel is very large, and of a pointed form.

The ſtyles in this plant are five; and the capſule is accordingly divided into five cells.

It is a native of the Eaſt, and of ſome parts of America.

Ray calls it *Androſæmum Conſtantinopolitanum flore maximo.*

Moriſon, *Androſemum flore et theca quinque capſulari omnium maximis.* Our gardeners call it *Tutſan, Great Saint John's wort*; and ſome of them, the *Ground roſe*, or the *Yellow roſe.*

8. Stinking Saint John's wort.

Hypericum fœtidum ſtaminibus longiſſimis.

The root is long, thick, divided, and ſpreading.

The ſtalk is ſhrubby, hard, upright, very much branched, covered with a brown bark, and brittle.

The leaves ſtand in pairs: they are of a pale green, and have no footſtalks: they are broad, oblong, and pointed at the ends.

The flowers are large and numerous: they ſtand at the extremities of the branches: they are of a beautiful yellow; and they are diſtinguiſhed by a peculiar mark, which is, that the threads are longer than the petals, and ſtand in a great buſh, in manner of a beard.

The ſeed-veſſel is roundiſh, and pointed: the ſeeds are brown.

The ſtyles in this flower are five; and the capſule is accordingly divided into five cells.

It is a native of the warmer parts of Europe, and of the Eaſt.

C. Bauhine calls it *Androſemum fœtidum capitulis longiſſimis filamentis donatis.* Dillenius, *Hypericum fœtidum fruteſcens minus*; and Cluſius, *Tragium.* Our gardeners call it *Shrub Saint John's wort*, and *Stinking tutſan*; and ſome, from the threads, *Bearded tutſan.*

9. Bay-leaved Saint John's wort.

Hypericum folus laurinis feminibus alatis.

The root is long, large, woody, and ſpreading.

The ſtem is firm, woody, brittle, and very much branched; and is covered with a pale brown bark.

The leaves are numerous, oblong, and of a pale green: they are delicately ſerrated at the edges, and obtuſe at the ends.

The flowers ſtand on ſlender pedicles riſing from the extremities of the ſtalks, and from the boſoms of the upper leaves: they are large and beautiful; and the ſegments of the cup are rounded and ſerrated.

The ſeed-veſſels are large, and pointed at the top: the ſeeds are numerons, large, winged, and brown.

There are five ſtyles in the flower of this ſpecies; and the cells in the capſule are alſo five.

It is a native of Carolina, and flowers in Auguſt.

This ſpecies has been ſo much miſtaken by authors, that it has been called an *Alcea*. Plukenet has named it *Alcea floridana quinque capſularis laurinis foliis leviter crenatis*; and others have followed him in this long denomination. Later writers have given it a peculiar name, *Laſianthus*: theſe have thought the little wing that grows to every ſeed a mark ſufficient for eſtabliſhing a new genus; but nature abhors theſe innovations. It is evidently an *hypericum*, and agrees in flower and ſeed-veſſel with all thoſe ſpecies of this genus which have five ſtyles in the flower, as the *oriental*, *tutſan*, and the reſt.

10. Penny's myrtle Ciſtus.

Hypericum fruteſcens foliis rugoſis.

The root is large, woody, and ſpreading.

The ſtem is woody, and covered with a brown bark: it is very much branched, brittle, and full of a kind of warts, or rough excreſcencies, reſembling ſcars, and the remains of injuries; but they are natural, and the ſame ſingularity is preſerved in the leaves.

Theſe ſtand in pairs: they are very numerous, of a rude green, ſmall, oblong, pointed, and in ſhape reſembling thoſe of myrtle; and they are full of the ſame kind of irregular riſings with thoſe upon the ſtalks, only ſmaller.

The flowers grow at the tops of the branches, and they are very large and beautiful: they are of a fine bright yellow colour, and they have the threads very long.

The ſeed-veſſel is roundiſh, but pointed; and the ſeeds are large and brown.

The ſtyles in the flower of this ſpecies are five; and the cells in the ſeed-veſſel are alſo five.

This is a ſpecies which, like the preceding, has troubled ſome authors to find its proper place, or generical name. The characters are the ſame with thoſe of all the *Saint John's worts* which have five ſtyles in the flower; and, accordingly, the beſt writers have placed it among them.

Magnol calls it *Hypericum ſive aſcyrum fruteſcens magno flore*. Van Royen, *Hypericum floribus pentagynis foliis et ramis verrucoſis*. The older writers have followed Cluſius, who places it among the ciſtus's, and calls it *Myrtociſtus Pennæi*, from the name of Doctor Penny, its firſt obſerver; and our gardeners follow theſe writers, and call it *Penny's ciſtus*.

We ſee, by the effect the reſemblance of the *ciſtus* and *hypericum* has had upon the earlier botaniſts, how extremely improper it muſt be to ſeparate them, as Linnæus had done, into various parts of his writings. Thoſe plants which could be confounded with one another by the leſs accurate obſervers, and which the moſt juſt examination ſhews to be ſo much allied to one another, ſhould certainly follow one another in the writings of thoſe botaniſts who form their method upon the laws eſtabliſhed by nature.

Theſe foreign ſpecies of *Saint John's wort*, in general, poſſeſs the ſame virtues with our own kind. They are all eſteemed vulnerary and balſamick.

The *coris* is celebrated alſo as a diuretick and deobſtruent.

GENUS V.

CHICKWEED.

ALSINE.

THE flower conſiſts of five petals, which are ſpread out plain: the ſeed-veſſel is of an oval ſhape, formed of ſix valves, but containing only a ſingle cell: the cup is compoſed of five little, pointed leaves, and remains when the flower is fallen, ſurrounding the ſeed-veſſel: the ſeeds are numerous, rounded, and compreſſed.

Linnæus places this among the *dycandria trigynia*; the filaments or threads being ten in each flower, and the ſtyles from the rudiment of the capſule three.

This author, after he has eſtabliſhed the characters of the genus on this foundation, is obliged to acknowledge that they are not always conſtant, certain, or regular; for that ſome plants are ſo luxuriant as to have five ſtyles inſtead of three; and that in others the threads are ſo uncertain, frail, and of ſhort duration, that they cannot well be numbered.

This acknowledgement of a variation in the number of the ſtyles ſtrikes at the root of the author's method; for it mingles *alſines*, which he places among the *decandria trigynia*, with *ſpergulas* and *ceraſtiums*, which he arranges among the *decandria pentagynia*.

This author's genera ſhould be printed, if the reader will admit the alluſion, as tradeſmen write their bills, *errors excepted*.

The

The name *alſine*, and its Engliſh, *chickweed*, have been given by writers to ſo many plants not at all belonging to this, nor poſſible to be aranged under any one genus, that the reader is deſired to keep in memory the characters on which the genus given under this name is here eſtabliſhed: it will prevent a great deal of perplexity, becauſe it will ſeparate thoſe plants, which are diſtinctly called *alſines*, from the various others which will be here placed in different ſucceſſive genera.

DIVISION I. BRITISH SPECIES.

1. Common Chickweed.

Alſine vulgaris.

The root is ſmall, white, ſlender, and furniſhed with many fibres.

The ſtalks are numerous, round, green, juicy, and eight inches in length: ſome of them trail upon the ground, and others riſe up.

The leaves are numerous: they are placed in pairs, and have long footſtalks: they are broad, and of a figure ſomewhat approaching to oval: their colour is a freſh green, and their ſubſtance ſoft and tender.

The flowers are numerous, ſmall, and white: they are placed on footſtalks riſing from the boſoms of the leaves, principally toward the upper part of the ſtalks; and they have the petals divided pretty deeply at their ends.

The ſeed-veſſel is ſmall and oval: the ſeeds are brown.

It is common every where about gardens, and where ground has been dug, and flowers the whole ſummer.

C. Bauhine calls it *Alſine media*. J. Bauhine, *Alſine vulgaris ſive morſus gallinæ*. Others, *Alſine media*, or *Alſine minor*. Our Engliſh names are *Common chickweed*, *Middle chickweed*, and *Leſſer chickweed*: of theſe the firſt is the moſt proper.

The plant varies extremely in ſize and form according to the degree of nouriſhment.

2. Great water Chickweed

Alſine perennis major.

The root is long, ſlender, and creeping: it runs under the ſurface, and ſends out many tufts of fibres in different places, and numerous ſtalks.

Theſe are round, upright, ſlender, of a pale green, and a foot or more in height: they are rarely at all branched.

The leaves ſtand in pairs at diſtances from one another; and they are large, oblong, and of a beautiful pale green.

The flowers ſtand at the tops of the ſtalks on ſlender pedicles, and are ſmall and white: the petals are divided ſo deeply that they appear to conſiſt each of ten rather than five.

The ſeed-veſſel is ſmall and roundiſh; and the ſeeds are numerous.

It is common in watery places, and flowers in June.

C. Bauhine calls it *Alſine altiſſima nemorum*. J. Bauhine, *Alſine major repens perennis*. We *Great marſh chickweed*.

3. Narrow-leaved water Chickweed.

Alſine aquatica foliis anguſtoribus.

The root is compoſed of many threads.

The ſtalks are numerous, ſquare, eight inches high, and of a pale green: they ſtand tolerably erect, and ſend out a few branches.

The leaves are oblong and narrow: they ſtand in pairs, and have no footſtalks: they are thin, tender, and of a pale green; broadeſt in the middle, undivided at the edges, and obtuſe at the ends.

The flowers are ſmall and white: they do not grow on the tops of the ſtalks, but from the boſoms of the leaves, ſometimes ſtanding on ſingle and ſeparate footſtalks, and ſometimes on the ſummits of little ſhoots riſing from thence: they are compoſed of five petals, divided ſo deeply that there appear to be ten of them.

The ſeed-veſſel is ſmall, and the ſeeds are numerous and minute.

It is common in damp parts of woods; and flowers in July.

C. Bauhine calls it *Alſine aquatica media*; and J. Bauhine, *Alſine longifolia uliginoſis proveniens locis*. Our people call it *Tender marſh chickweed*, and *Fountain chickweed*.

4. Broad-leaved mountain Chickweed.

Alſine latifolia flore profunde ſecto.

The root is ſmall, white, and jointed.

The ſtalk is uſually ſingle, and tolerably upright: it is ſquare, of a pale green, and not at all hairy; and it ſends out no branches, but at the top divides into ſeveral parts.

The leaves are placed in pairs with great regularity: they have long footſtalks, and they are large and oblong: they are broadeſt at the baſe, waved along the edges, and terminate in a ſharp point.

The flowers are large and white: they ſtand at the tops of thoſe branches into which the ſtalk divides at the top; and they are moderately large, and of a ſnow white: each is compoſed only of five petals, but they are divided to the baſe ſo that there appear ten; and theſe are long, very narrow, and ſomewhat curled.

The ſeed-veſſel is oval, and the ſeeds are ſmall and brown.

It is found in our northern counties in damp woods; and flowers in July.

C. Bauhine calls it *Alſine montana latifolia flore laciniato*. Columna, *Alſine hederacea montana maxima*.

5. Small branched Chickweed.

Alſine minor ramoſa.

The root is ſmall and long, furniſhed with many fibres, and penetrates deep.

The ſtalks are extremely numerous, and ſlender: they are four inches high, and of a pale green; and they are ſo much branched that a ſingle plant of it forms a thick buſhy tuft.

The leaves ſtand in pairs, and are placed at ſmall diſtances from one another: they are of a duſky green, ſhort, and pointed at the ends.

The flowers are ſmall and white, and they are compoſed each of five petals, undivided at the tips.

The ſeed-veſſel is oval; and the ſeeds are very numerous, ſmall, and brown.

It is common on old walls, and flowers in June.

C. Bauhine calls it *Alſine minor multicaulis.* Others, *Alſine minima.*

6. Plantain-leaved Chickweed.

Alſine foliis plantaginis.

The root is compoſed of numerous ſlender fibres.

The ſtalks are numerous, weak, tender, and ſix inches high.

The leaves ſtand in pairs without footſtalks: they are oblong and broad, largeſt in the middle, pointed at the end, and of a pale green; and they have the ribs running, in the manner of thoſe of plantain leaves, all lengthwiſe.

This is a very obvious particular, and chiefly characteriſes the plant.

The flowers riſe from the boſoms of the leaves on ſlender footſtalks, or they ſtand at the tops of the young ſhoots, which riſe from the leaves in great numbers: they are ſmall and white.

The ſeed-veſſel is roundiſh, and the ſeeds are ſmall, numerous, kidney-ſhaped, and brown.

It is a native of our woods, and flowers in July.

C. Bauhine calls it *Alſine plantaginis foliis.* Others have followed him.

The petals of the flower in this ſpecies, as in the preceding, are undivided.

Linnæus makes the diviſion of the petals a generical character of *Alſine* or *chickweed*: Mr. Ray did the ſame before him; but we ſee in theſe two plants the error of that determination: they plainly and palpably belong to the ſame genus with the *common chickweed*, and we have thus joined them with that, and others of its kind, under the ſame common name *alſine*: Mr. Ray, ſeparating them on this ſlight account, has been obliged to place them among the *ſpurreys*, *ſpergulæ*, plants with which they have no alliance.

7. Common Stitchwort.

Alſine flore majore anguſtifolia.

The root is ſlender and creeping: it runs under the ſurface, and ſends out cluſters of fibres from many parts.

The ſtalks are numerous, upright, and ſlender: they are of a browniſh green, harſh, and edged; and toward the upper part have many branches.

They ſupport themſelves among buſhes, and riſe to a foot and half high.

The leaves ſtand in pairs, and are long, narrow, and ſharp-pointed.

The flowers are numerous, ſnow white, large, and very beautiful: they conſiſt each of five petals divided at the ends; and they ſtand on ſlender footſtalks growing from the tops of the branches, and of the upper diviſions of the ſtalks.

The ſeed-veſſels are large and roundiſh; and the ſeeds are numerous and ſmall.

It is common under hedges, and flowers in May.

C. Bauhine calls it *Caryophyllus holoſteus arvenſis glaber flore majore.* Others, *Gramen leucanthemum.* We *Stitchwort.*

8. Small-flowered Stitchwort.

Alſine anguſtifolia flore minore.

The root is ſlender and creeping.

The ſtalks are numerous, ſtraggling, weak, and a foot high.

The leaves are narrow and long, harſh to the touch, and of a bluiſh green.

The flowers are white and ſmall: they grow at the tops of the ſtalks, on ſlender pedicles, and they are very numerous.

They conſiſt each of five petals, divided at the edge; and they have red buttons on the threads: this is a ſingular circumſtance, and diſtinguiſhes the plant at ſight.

The ſeed-veſſel is roundiſh, and the ſeeds are numerous.

It is common under hedges, together with the former; and flowers in June.

C. Bauhine calls it *Caryophyllus holoſteus arvenſis glaber flore minore.* Others, *Gramen leucanthemum minus.*

9. Low Stitchwort with great flowers.

Alſine anguſtifolia humilior floribus maximus.

The root is compoſed of a tuft of fibres, and does not creep under the ſurface, as in the other.

The ſtalks are numerous, ſharply edged, rigid, harſh to the touch, and firm: they are not much branched, and they are ten inches high: they ſupport themſelves very well at this height, and do not need the aſſiſtance of buſhes, as the common kind.

The leaves are narrow, long, and ſharp-pointed: they ſtand in pairs, and are of a greyiſh green colour.

The flowers are large and white: they ſtand at the tops of the branches, and are compoſed of five petals notched at the top.

The ſeed-veſſel is round, and the ſeeds are numerous.

It is a native of our fen counties, and flowers in June.

Ray calls it *Caryophyllus holoſteus arvenſis medius.* Mentzelius, *Caryophyllus holoſteus foliis gramineis.*

10. Fine-leaved Chickweed.

Alſine tenuifolia.

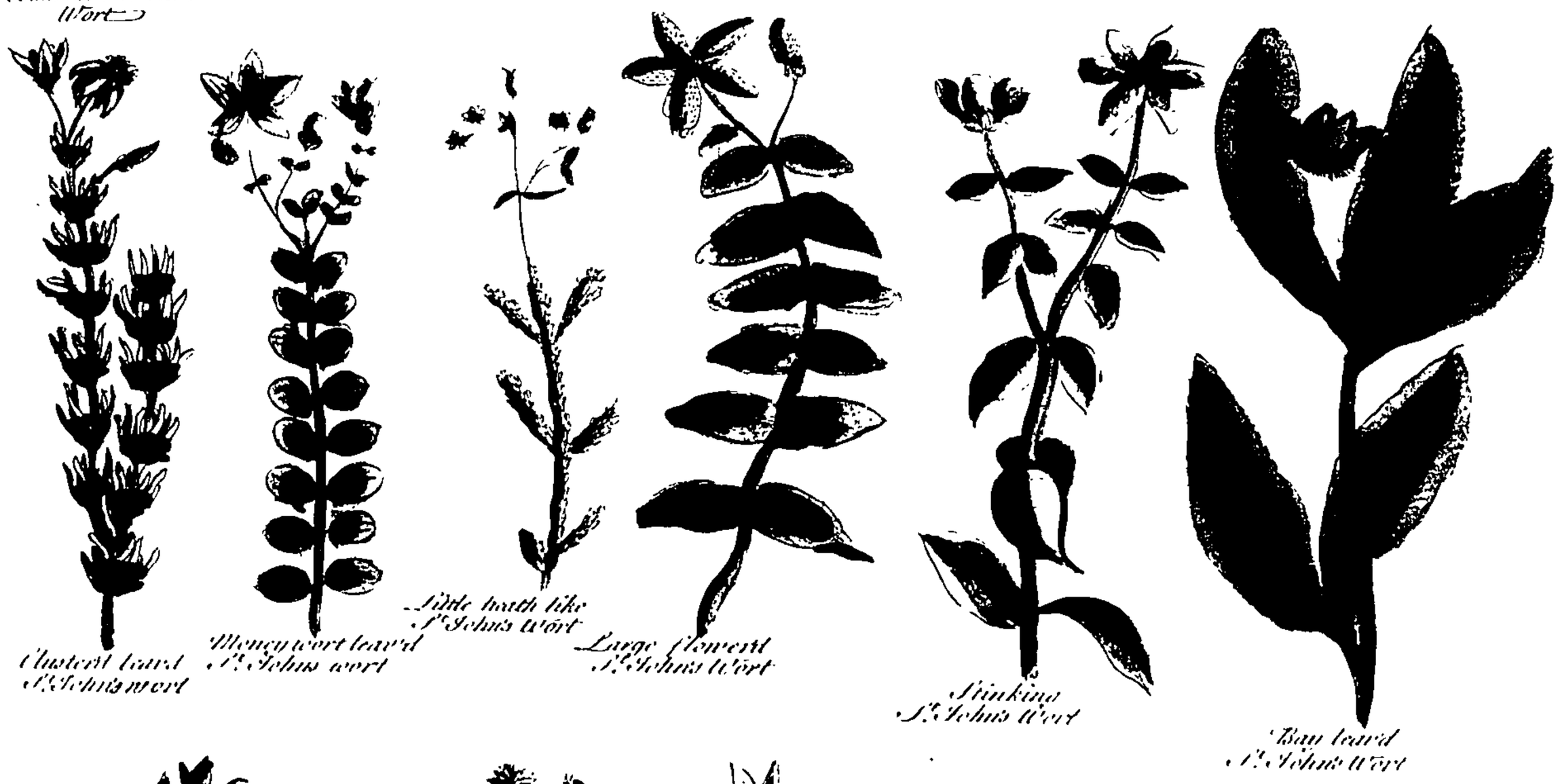
The root is a tuft of long and ſlender fibres: the leaves that firſt riſe from it are extremely narrow, and of a pale green: many ſtalks riſe among theſe, and they then grow yellow, and ſoon fade.

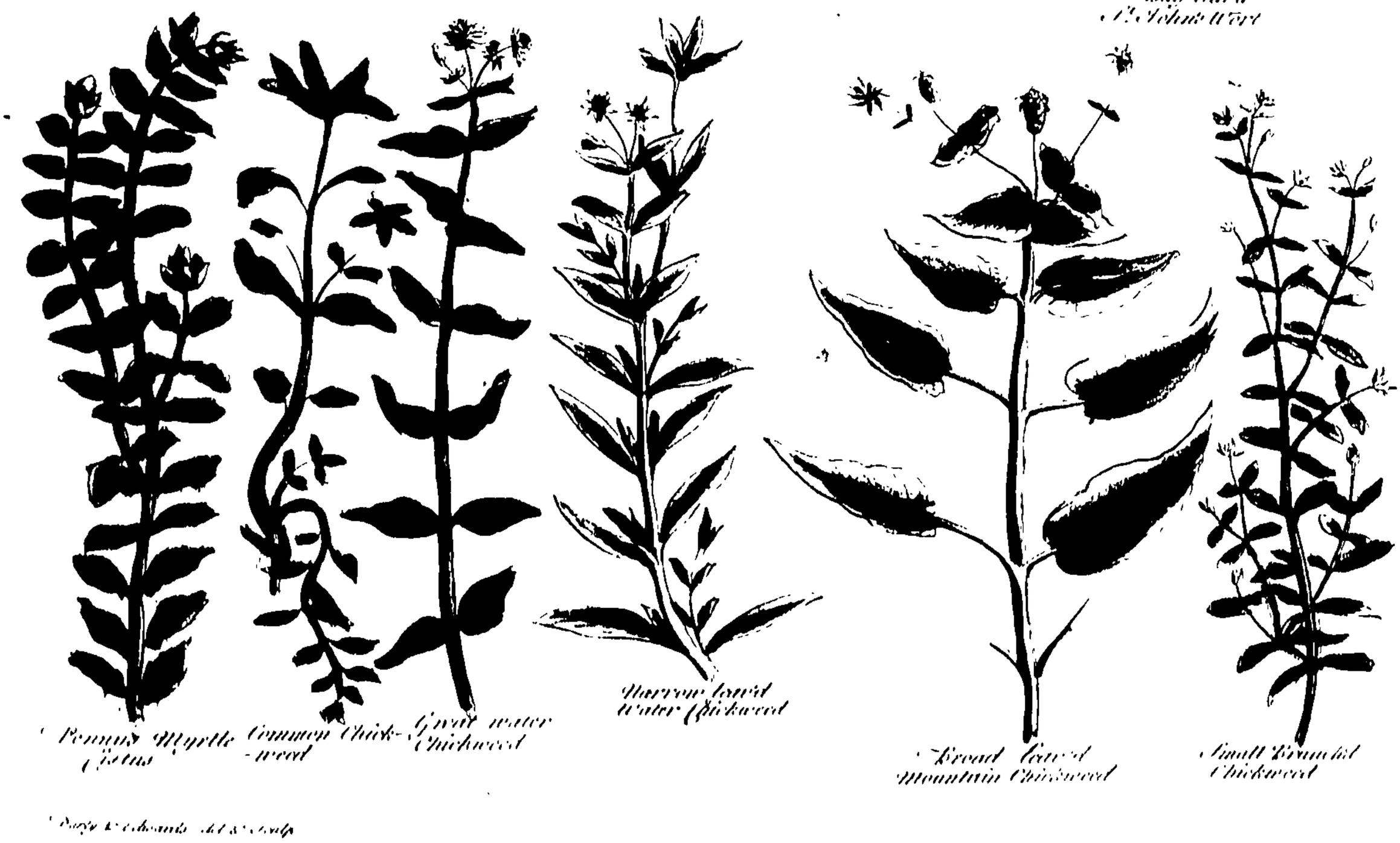
The ſtalks are ſlender, upright, and ten inches high.

They are of a yellowiſh green, not much branched, and divided at the top into a wide head.

The


Common St Johns Wort
Small Procumbent St Johns Wort
Broad leaved hairy St Johns Wort
Broad leaved smooth St Johns Wort
Tutsan
St Peters Wort
Spanish St Johns Wort
Perforate St Johns Wort


Clustered leaved St Johns wort
Mercury wort leaved St Johns wort
Little heath like St Johns Wort
Large flowered St Johns Wort
Stinking St Johns Wort
Bay leaved St Johns Wort


Pennyroyal Mynthe leaved Tutsan
Common Chickweed
Great water Chickweed
Narrow leaved water Chickweed
Broad leaved Mountain Chickweed
Small Procumbent Chickweed

The leaves are ſmall, oblong, and narrow.

The flowers are ſmall and white: they ſtand on ſlender footſtalks, and many open together.

The ſeed-veſſel is ſmall, and the ſeeds are numerous and roundiſh.

It is not uncommon in Kent and Suſſex in dry barren places. It flowers in July.

J. Bauhine calls it *Alſine tenuifolia*; and others have continued in general the name unaltered.

11. Little graſſy-leaved Chickweed.

Alſine puſilla foliis graminis flore magno.

The root is long, ſlender, and furniſhed with numerous ſmall fibres.

The ſtalks are ſlender, upright, not at all branched, and about four inches high.

The leaves ſtand in pairs, at moderate diſtances, and pointing upwards: they are oblong, narrow, ſharp-pointed, and of a fine green; ſo that they very much reſemble ends of ſmall graſs leaves.

The flowers are very large, and ſnow white: two or three ſtand on the top of the ſtalk, and they conſiſt each of five large petals, which are not divided at the ends, but terminate in a point.

The ſeed-veſſel is large, and the ſeeds are numerous, and very minute.

It is common in our northern counties on rocks, and the ſides of high hills. It flowers in April.

Ray calls it *Alſine puſilla pulchro flore folio tenuiſſimo noſtras, ſive Saxifraga puſilla caryophylloides flore albo pulchello*; a name longer than the plant.

12. Cluſtered-leaved Chickweed.

Alſine foliis anguſtis crebris flore majore.

The root is ſmall and ſlender, white, and furniſhed with many fibres.

The ſtalks are very numerous, ſlender, ridged, upright, and about five inches high: they are of a pale green, and they ſend out frequent branches.

The leaves ſtand very thick: the principal ones are placed in pairs at ſmall diſtances from one another, and their boſoms are crowded with cluſters of others; ſo that they appear covered with them.

They are narrow, oblong, and ſharp pointed: on the upper parts of the ſtalks the principal leaves are leſs diſtinguiſhable; and they cover the branches at the joints, as the leaves of heath.

The flowers ſtand ſingly at the tops of the branches, and of the principal ſtalk; and they are very large, and white.

The ſeed-veſſel is ſmall and round; and the ſeeds are minute and numerous.

It is common in damp places, and flowers in June.

C. Bauhine calls it *Alſine nodoſa Germanica*. J. Bauhine, *Arenaria*. The common writers call it *Saxifraga paluſtris Anglica*; and we, *Engliſh marſh ſaxifrage*, and *Fine-leaved ſaxifrage*.

13. Little roundiſh-leaved Chickweed.

Alſine parva foliis ſubrotundis.

The root is ſmall and fibrous.

The ſtalks are numerous, weak, and branched: they are of a pale green, and five inches high in favourable ſoils, in other places not above three.

The leaves ſtand in pairs, and are ſmall and roundiſh; of a thin, tender ſubſtance, and obſcure green.

The flowers are ſmall and white.

The ſeed-veſſels are large, and of an oval figure; and the ſeeds numerous and yellowiſh, of a rounded figure, but flatted.

It is not uncommon in the dry paſtures of Buckinghamſhire; and flowers in July.

Ray calls it *Alſine montana minima acini effigie rotundifolia*; and others follow him.

14. Large-fruited ſea Chickweed.

Alſine maritima puſilla fructu magno.

The root is long, thick, and furniſhed with a great many fibres.

The ſtalks are numerous and ſhort: they are ſpread upon the ground, and ſo covered with leaves that it is hard to diſtinguiſh their form.

The leaves are ſhort and broad, pointed at the end, and of a bluiſh green.

They ſtand in pairs, but generally grow the oppoſite ways; ſo that they look, upon the whole, to be diſpoſed croſſwiſe.

The flowers are ſmall and white; and the ſeed-veſſels are oval: they are remarkably large for ſo ſmall a plant, and contain numerous ſeeds.

It is common on our ſea-coaſts, and flowers in June.

C. Bauhine calls it *Alſine litoralis portulacæ foliis*. Others, *Anthyllis maritima lentifolia*.

15. Procumbent narrow-leaved Chickweed.

Alſine maritima procumbens anguſtifolia.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalks are very numerous, ſmall, weak, and of a pale green: they ſpread every way upon the ground, and are four inches long, and very much branched.

The leaves are numerous: they ſtand in pairs, and are full of young ones, and of ſmall ſhoots of branches, in their boſoms; ſo that the whole plant is very buſhy.

The leaves are ſhort, and narrower than thoſe of the laſt mentioned ſpecies.

The flowers riſe from the boſoms of the leaves all the way up the ſtalks: they are numerous, ſmall, and white.

The ſeed veſſels alſo are ſmall; and the ſeeds minute and numerous.

It is common on our ſea coaſts, and flowers in June.

C. Bauhine calls it *Anthyllis maritima chamæſyche ſimilis*. Ray, *Alſine maritima ſupina foliis chamæſicæs*. Our people, *Sea knotgraſs*, and *Sea chickweed*.

16. Small-flowered water Chickweed.

Alſine paluſtris floſculis parvis.

The root is ſmall, divided, and full of fibres.

The ſtalks are numerous, ſmall, irregularly branched, and about an inch and half high.

The leaves are placed in pairs: they are oblong, thick, and of a freſh green; obtuſe at the ends, and not at all divided at the edges.

The flowers ſtand at the tops of the ſtalks, and are very ſmall, and white: they ſcarce ever open.

The ſeed veſſel is ſmall, and opens in three parts, and contains three ſeeds.

It is common in places where water is juſt dried up; and flowers in June.

Ray calls it *Alſine parva paluſtris tricoccos foliis portulacæ*. Merret, *Alſine floſculis conniventibus*. We, in Engliſh, *Blinks*.

17. Round leaved creeping Chickweed.

Alſine puſilla repens foliis rotundis.

This is a ſingular and very elegant ſpecies.

The root is long, ſlender, and white: it creeps up under the ſurface, and ſends out tufts of fibres in different places.

The leaves riſe in cluſters three or four together at ſmall diſtances, and they ſtand ſingly on long and very ſlender footſtalks: from the ſame ſpot, where they riſe, there grow alſo ſmall, creeping ſtalks, which run upon the ground, and ſend up other cluſters of leaves in different places.

The leaves are ſmall, round, and dented at the edges; and they are of a pale green.

The flowers are very ſmall; they ſtand ſingly on tender footſtalks riſing from the boſoms of the leaves; and they are of a pale fleſhy colour.

The ſeed-veſſel is very ſmall, and the ſeeds are minute and few.

It is not uncommon on the ſides of hills in our weſtern counties, but is ſo ſmall that it is eaſily overlooked. It flowers in July.

Ray calls it *Alſine ſpuria puſilla repens foliis ſaxifragæ aureæ*.

Theſe ſpecies of Chickweed are all ſuppoſed to poſſeſs the ſame qualities with the common kind; but they have not been much regarded.

The *common chickweed* has the credit of being cooling and diuretick; but little notice is taken of it. Outwardly it is cooling, but neither way demands much notice.

DIVISION II. FOREIGN SPECIES.

1. Large-fruited rock Chickweed.

Alſine petræa fructu majori.

The root is ſlender, divided into many parts, and furniſhed with numerous, fibres.

The ſtalks are ſlender, upright, and toward the tops divided into ſeveral branches.

The leaves are ſmall, oblong, narrow, and of a pale green: they are broadeſt toward the middle, and terminate in a point.

The flowers are numerous and ſmall: they are white, and ſtand on ſhort, ſlender footſtalks.

The ſeed-veſſel is round and large; and the ſeeds are ſmall, numerous and brown.

It is frequent on the mountains in Germany; and flowers in Auguſt.

C. Bauhine calls it *Alſine minor lini capitulis*. Geſner, *Alſine petræa*.

2. Great Chickweed with ſerrated leaves.

Alſine maxima foliis ſerratis.

The root is compoſed of numerous fibres.

The ſtalks are round, firm, erect, a foot and half high, and of a pale green; and they are not at all branched.

The leaves ſtand in pairs without footſtalks: they are very large, and broadeſt at the baſe, where they meet in ſo cloſe a manner that the ſtalk appears to grow through them: they are ſharply ſerrated at the edges, and pointed at the ends.

The flowers grow at the tops of the ſtalks, and are large, and ſnow white; they conſiſt each of five petals divided pretty deeply at the tips.

The ſeed-veſſel is large, and the ſeeds are numerous, rounded, and flatted.

It is common among rocks in Italy; and flowers in Auguſt.

Men zelius calls it *Alſine maxima ſolanifolia*.

GENUS VI.

MOUSE-EAR CHICKWEED.

CERASTIUM.

THE flower is compoſed of five petals, nip'd at the ends, and regularly diſpoſed: the ſeed-veſſel is long, crooked, obtuſe, and dented into five parts at the end: the cup is compoſed of five leaves, and remains when the flower is fallen.

Linnæus places this among the *decandria pentagynia*; the threads in the flower being ten, and the ſtyles from the rudiment of the capſule five.

We are unlucky in that we have no Engliſh ſingle name for this genus: we call it *horned chickweed*, from the ſhape of the ſeed-veſſels; and *mouſe-ear chickweed*, from the form and hairyneſs of the leaves in moſt of the ſpecies; but theſe being all compound terms, it is better to uſe the Latin name *ceraſtium*.

Linnæus is reduced to the neceſſity of making an exception at the bottom of his character of this genus, as of the former, which overthrows the character of the greater arrangement of the claſs: he acknowledges there is a ſpecies which have only five ſtamina.

In this Linnæus is right, that this plant, which has only five threads, is a proper and certain ſpecies of *ceraſtium*, though the reſt of the plants of that name have ten: but this ſhews the uncertainty of the characters on which he eſtabliſhes claſſes; for the great and ſingle circumſtance on which the preſent claſs is formed is the having ten threads.

DIVISION I. BRITISH SPECIES.

1. Dwarf early Ceraſtium.

Ceraſtium pumilum præcox:

The root is a tuft of ſlender fibres.

The leaves that riſe immediately from it are broad, ſhort and obtuſely pointed: they grow in a little tuft, and are of a pale green.

In the centre of this tuft riſes a ſingle ſtalk: this is round, hairy, upright, rarely at all branched, and three inches high.

The leaves ſtand in pairs at conſiderable diſtances: they are ſmall, hairy, and ſhort: they have no footſtalks, but ſurround the ſtalk at the baſe.

The flowers ſtand at the tops of the ſtalks, and are ſmall, white, and compoſed each of five petals nipp'd at the ends: they rarely open.

The ſeed-veſſel is ſmall, long, and cloſe at the end.

The ſeeds are numerous and minute.

It is common on walls and dry banks; and flowers in April. When it has ſtood ſome weeks, it ſometimes is a little branched; but it is altogether diſtinct from the larger kinds. The flowers ſtand on ſhorter footſtalks, and the plant never is at all clammy, as the others uſually are. The leaves alſo are pointed a little more than in them.

C. Bauhine calls it *Alſine hirſuta minor*. Dillenius, *Ceraſtium hirſutum minus parvo flore*.

2. Common broad-leaved Ceraſtium.

Ceraſtium latifolium vulgare.

The root is compoſed of ſlender fibres.

The ſtalks are numerous, round, hairy, and of a pale green: they are not much branched, and they are generally ſomewhat clammy to the touch.

The leaves ſtand in pairs at ſmall diſtances; and they are broad, ſhort, hairy, and of a duſky green.

The flowers are ſmall and white: they ſtand on ſhort pedicles riſing from the boſoms of the leaves, and they rarely open well.

The ſeed-veſſel is long, crooked, and dentated at the end: the ſeeds are numerous and ſmall.

It is frequent in paſtures, and flowers in ſpring. The whole plant is frequently covered with a clammy moiſture.

C. Bauhine calls it *Alſine hirſuta altera viſcoſa*. Ray, *Alſine hirſuta myoſotis latifolia præcocior*. Merret, *Alſine myoſotis humilior et rotundiore folio*.

3. Narrow-leaved Ceraſtium.

Ceraſtium foliis anguſtioribus.

The root is compoſed of ſmall, white fibres.

The ſtalks are numerous, ſlender, hairy, of a pale green, and five or ſix inches high.

The leaves ſtand in pairs; and they are oblong, narrow, of a pale green, hairy, and often clammy, as is alſo the ſtalk.

The flowers ſtand on pedicles riſing in the boſoms of the upper leaves; and they are larger than in the others and white.

The ſeed-veſſel is long, ſlender, and lightly dentated at the end.

The ſeeds are numerous, minute, and brown.

It is common in our paſtures, and flowers in July.

C. Bauhine calls it *Alſine hirſuta magno flore*. Merret, *Alſine myſotis procerior et longiore folio*.

Sometimes this ſpecies is altogether ſmooth, ſtalks and leaves.

4. Creeping Ceraſtium with great flowers.

Ceraſtium repens floribus amplis.

The root is ſlender, and runs under the ſurface.

The ſtalks are numerous, round, hairy, of a pale green, and five or ſix inches in length: part of them ſtand erect, and part are procumbent.

The leaves grow in pairs, without footſtalks, and are placed at conſiderable diſtances: they are ſhort, obtuſe, and of a pale green, moderately hairy, and of a firm ſubſtance.

The flowers grow on long, ſlender footſtalks, and are very large, and of a ſnow white: they are compoſed each of five petals, dented at the ends.

The ſeed-veſſel is long, thick, and crooked, and dented at the top; and the ſeeds are ſmall, numerous, and angular.

It is a native of our northern counties, and flowers in Auguſt.

C. Bauhine calls it *Caryophyllus holoſteus alpinus latifolius*. It is a very ſingular and beautiful plant.

5. Woolly Ceraſtium.

Ceraſtium tomentoſum.

The root is fibrous and brown.

The ſtalks are numerous and weak: they are of a whitiſh colour, and ſome of them riſe upright to the height of eight inches, but moſt lie upon the ground.

The leaves are broad, ſhort, and obtuſe: they are placed in pairs, and they are of a woolly ſoftneſs to the touch, and of a white colour.

The flowers are large and white: they ſtand on ſhort pedicles riſing from the tops of the ſtalks, and from the boſoms of the upper leaves.

The ſeed-veſſel is long, and conſiderably bent: the edge deeply divided, and the colour a pale brown.

The ſeeds are ſmall and browniſh.

It is found on the Welch mountains, and ſcarce any where elſe in Britain. It flowers in Auguſt.

C. Bauhine calls it *Caryophyllus holoſteus tomentoſus latifolius*.

The flowers is larger than in the former ſpecies.

We know nothing of the virtues of any of theſe plants, nor of the foreign ſpecies following.

DIVI-

DIVISION II. FOREIGN SPECIES.

Long-leaved Ceraſtium.

Ceraſtium anguſtifolium vaſculo longo.

The root is ſmall and white, furniſhed with a few fibres, and inſipid to the taſte.

The ſtalk is ſingle, upright, and five inches high: it is hairy, and of a pale green: it ſends out no branches, but at the top it divides, and ſpreads into a large head.

The leaves are narrow and long; they ſtand in pairs, and the joints whence they riſe are marked by a knot, and a little ſwelled: the ſtalk alſo frequently bows from joint to joint.

The flowers are ſmall and white: they ſcarce open perfectly; one generally ſtands at the top of the main ſtalk, whence the principal branches that form the head riſe; the others are placed on thoſe branches which riſe much higher.

The ſeed-veſſel is long, ſlender, and a little crooked; ſo that it reſembles a cock's ſpur.

The ſeeds are blackiſh.

It is a native of Spain, and flowers in July, in the cornfields.

Cluſius calls it *Alſine corniculata*; a name copied by moſt, and tranſlated by our Engliſh writers with that of the author: they call it *Cluſius's horned chickweed.* Some have been for making it a ſpecies of *cockle*; but they never ſaw the plant.

GENUS VII.

SPURREY.

SPERGULA.

THE flower is compoſed of five petals, which open regularly, and ſpread out; and are oval and hollowed: the ſeed-veſſel is oval, and compoſed of five valves; but contains only one cell: the cup is compoſed of five oval, hollow leaves regularly diſpoſed, and ſtands with the ſeed-veſſel after the flower is fallen: the ſeeds are edged with a film.

Linnæus places this among his *decandria pentagynia*; the threads in the flower being ten, and the ſtyles from the rudiment of the fruit five.

The difference s evident between this plant and the *alſine*, not only in its characters, but form, and manner of growing; wherefore Mr. Ray judged unhappily in joining them, eſpecially as there are of each numerous ſpecies.

1. Common Spurrey.

Spergula major.

The root is ſmall, ſlender, long, and furniſhed with numerous fibres.

The ſtalks are numerous, round, upright, and of a pale green: they have few branches toward the bottom, but many toward the top.

The leaves are very narrow, oblong, of a deep green, and often curled: they ſtand in a conſiderable number at each joint, ſurrounding the ſtalk, in the manner of thoſe of what are called the ſtellate plants.

The flowers are ſmall and white; and they conſiſt each of five undivided petals.

The ſeed-veſſel is large, and the ſeeds are ſmall and blackiſh.

The ſize of the plant varies extremely according to the nature of the ground: ſix or eight inches is a common height for it; ſometimes we ſee it more than a foot; and in Flanders, where they have fields of it, it is often two feet high.

It is common wild on our plowed grounds; but has ſometimes been cultivated in England, as it is abroad, for the uſe of cattle.

C. Bauhine calls it *Alſine ſpergula dicta major.* Others, *Spergula.*

2. Purple Spurrey.

Spergula floribus purpureis.

The root is long, ſlender, full of fibres, and penetrates deep.

The ſtalks are numerous, weak, and very much branched: they are five or ſix inches long, and they lie ſpread upon the ground.

The leaves are numerous, ſmall, and of a pale green.

The flowers ſtand at the tops of the branches in great numbers; and they are ſmall, but of a beautiful pale purple.

The ſeed-veſſels are large, and the ſeeds are very numerous, and ſmall.

It is common on dry hilly ground, and flowers in May. We have it in Hidepark, and other places about London, in great abundance.

C. Bauhine calls it *Alſine ſpergulæ facie minor, ſeu Spergula minor flore ſubcæruleo.*

The leaves in this ſpecies ſeem, on a ſlight view, to ſurround the ſtalk in great numbers at every joint, as thoſe of the *common ſpurrey*; but, when the plant is more nicely examined, there are found only two principal leaves at each joint, and the others are young ſhoots in their boſoms: they ſtand very thick, ſo that the miſtake is eaſy.

3. Large-flowered Spurrey.

Spergula flore majore.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalks are numerous, round, jointed, and eight inches high.

The leaves are oblong, ſomewhat broad, and of a deep green: they are of a firmer ſubſtance than in the *common ſpurrey*, and do not curl, or

turn, as they do: they ſurround the ſtalk, growing ſeveral at each joint; but, as they are broader, they are alſo fewer than in the *common ſpurrey*.

The flowers ſtand at the tops of the ſtalks; and they are larger than thoſe of the common kind, and of a milk white.

The ſeed-veſſel is large, and roundiſh, or oval; and the ſeeds are numerous and ſmall: they are black, and have the edge white.

It is common on ſandy grounds in Ireland, and in the weſt of England; and flowers in April.

Ray calls it *Alſine ſpergula dicta ſemine membranaceo fuſco*. Dillenius, *Spergula annua ſemine foliaceo nigro circulo membranaceo albo cincto*.

4. Sea Spurrey.

Spergula maritima.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalks are numerous, upright, and ſix or eight inches high: they are of a pale green, very much branched toward the top, and jointed at ſmall diſtances.

The leaves are numerous, and ſtand round the ſtalk at the joints, in form of the rays of a ſtar: they are oblong, narrow, and of a pale green.

The flowers grow at the tops of the branches in great numbers; and they are ſmall and purple.

The ſeed-veſſel is large, and the ſeeds are light and brown.

It is common on our ſea-coaſts, and flowers in July.

C. Bauhine calls it *Alſine ſpergulæ facie media*. Others, *Sagina ſpergula minor*, and *Spergula marina*. Our people call it *Sea ſpurrey*, and *Salt-marſh ſpurrey*.

5. Dwarf ſea Spurrey.

Spergula maritima minima.

The root is long and ſlender.

The ſtalks are numerous, and four inches long: they frequently all trail upon the ground, but ſometimes a few of them are erect.

The leaves are narrow, oblong, ſmall, and of a pale green.

The flowers are minute, and of a bluiſh purple.

The ſeed-veſſels are ſmall, and the ſeeds duſky, but edged with a white very narrow circle of a membranaceous matter, as the others.

The leaves in this plant are very numerous; but the joints of the ſtalk are much more diſtant than in the others; ſo that more of it is ſeen.

It is common in our ſalt marſhes, and flowers in May.

Dillenius calls it *Spergula maritima flore parvo cæruleo ſemine vario*. He firſt obſerved it on Sheepy iſland.

The virtues of theſe ſeveral plants are trifling; but their uſes may be very great.

Our farmers, who uſed to go in a very limited tract of huſbandry, have of late years introduced from other countries many new products, by the aſſiſtance of which they change their crops upon the ſame ground very happily, avoid the former neceſſity of fallow-ſeaſons; and add vaſtly to their profits.

Among the other uſeful plants cultivated in the neighbouring countries is the *common ſpurrey*: this makes a very wholeſome and rich food for the horned cattle: it is therefore worth more notice in England. But there is another ſpecies, the *common ſea ſpurrey*, which has not been yet cultivated any where, but might be in many places to a great advantage.

The ſea-coaſt is the natural ſoil for this plant; and it would therefore be very proper, and very beneficial to the farmer to ſow it on ſuch lands as, lying very near the ſea, will not bear any other crop to advantage.

There is a vaſt quantity of this land in the kingdom, which at preſent lets for very little, and yields very little; but if this plant were introduced upon it, would be of great value. Its qualities are the ſame in all reſpects with thoſe of *common ſpurrey*.

The END of the NINTH CLASS.

THE

BRITISH HERBAL.

CLASS X.

Plants with the flower compoſed of FIVE PETALS *regularly diſpoſed, and the ſeeds contained in a* SINGLE CAPSULE; *and with the leaves alternate, or not in pairs, upon the ſtalks.*

THESE plants, if the flowers and ſeed-veſſels alone were to be conſidered in the eſtabliſhment of claſſes, would have been arranged in the ſame with thoſe of the preceding; yet they are extremely different from them. The alternate diſpoſition of the leaves is an obvious character, and is univerſal among them; as the having them in pairs is of the preceding.

This may, to a leſs conſiderate obſerver, appear too trivial an incident for the forming a claſſical diſtinction; but nature, whoſe ſteps alone I follow, ſhews it to be otherwiſe. Let him reflect, and obſerve, that of all the genera treated of in the preceding claſs there is not one which has belonging to it a ſingle ſpecies the leaves of which ſtand alternately; and that among thoſe which conſtitute this claſs, the character of which is to have the leaves alternate, there is not one that has a ſingle ſpecies with the leaves in pairs; and he will then find this, which before ſeemed to him but a caſual incident in the growth of the plants, a regular and univerſal law eſtabliſhed by nature among theſe plants, and in all the genera not once violated.

He will from this, not only learn the error of his firſt opinion, but will ſee that nature made the diſpoſition of the leaves of plants a certain and regular part of their eſtabliſhed diſtinctions, and that Linnæus's method muſt have been imperfect, were it only for that it has not regarded them as any part of claſſical diſtinctions. The more ſtrict and more general marks of diviſion are placed in larger and more obvious parts of the flower and ſeed-veſſel; but as there are in the threads, and other ſmaller parts of it alſo, very remarkable particularities, ſo there are in the diſpoſition of the leaves, and the general growth of the plant.

Theſe laſt, as they are the more obvious of the two ſubordinate characters, ſo they are the moſt certain, and free from variation.

We find, in many of the particular genera of the preceding claſs, certain ſpecies in which the number of the threads vary; and this Linnæus finds himſelf obliged to own, even where he is eſtabliſhing the characters of the genus upon them; but we do not ſee any inſtance of the leaves being placed variouſly in the ſeveral ſpecies of any genus therein.

This is a point we ſhall have occaſion to treat more at large when we come to ſpeak of the ſtellate plants; but thus much may be proper to be obſerved here, to eſtabliſh the diſtinction of the preſent, and prepare for that of the ſucceeding claſs.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this kingdom.

GENUS I.

SUNDEW.

ROREL LA.

THE flower conſiſts of five petals, regularly diſpoſed into a hollowed form: the ſeed veſſel is oval, and has five valves at the top, but contains only a ſingle cell: the cup is formed of a ſingle piece, divided into five ſegments, and remains when the flower is fallen.

Linnæus places this among the *pentandria pentagynia*; the threads in the flower being five, and the ſtyles from the rudiment of the fruit of the ſame number.

This author has taken away the antient name of this genus, which is *ros ſolis*, and calls it *droſera*. As a generical name conſiſting of more than one word is always improper, and as, beſide the name *ros ſolis*, there is a familiar one always underſtood, and uſed as ſynonymous with it, that is *rorella*, I have choſen this for the name of the genus; every one converſant in the leaſt with theſe ſtudies knowing it.

DIVISION I. BRITISH SPECIES.

1. Common Sundew.

Rorella vulgaris.

The root is compoſed of a few, ſlender crooked fibres.

The leaves riſe from it in a little cluſter ten or a dozen together, and form a very ſingular appearance: each has its long and ſlender footſtalk; and both that and the leaf are very hairy: the body of the leaf is roundiſh, or a little inclining to oval: the colour is a dingy purple, and the ſubſtance is fleſhy.

The hairs that grow on this, and on the footſtalks, are long, robuſt, and yellowiſh; and they differ greatly from thoſe of any other known plant, except the ſpecies of the ſame genus: they are often waved or crooked, and there ſtand on the leaves large drops of a tranſparent fluid in the midſt of the hotteſt days: from this the plant received its name of *ſundew*.

The ſtalk riſes in the centre of this tuft of leaves, and is upright, ſingle, undivided, and ſix inches high: its colour is purple, and it has no leaves or branches; only that at the top it ſometimes divides into two parts.

The flowers ſtand on the diviſions, ten or a dozen on each: they are ſmall, and rarely keep long open.

The ſeed-veſſel is ſmall and oval; and the ſeeds are alſo oval, numerous, and ſmall.

It is common on the boggy parts of heaths; and flowers in June.

C. Bauhine calls it *Ros ſolis folio rotundo*. Others, ſimply *Ros ſolis*. Several of the following ſpecies of this genus agree with this in having no leaves on the ſtalk: it is on this account the claſſical character ſays, theſe plants have leaves alternate, or not in pairs: thoſe from the root grow all from a ſingle head, and they are all the leaves belonging to theſe kinds.

2. Roundiſh-leaved perennial Sundew.

Rorella rotundifolia perennis.

The root conſiſts, not of a few ſlight fibres, as in the preceding, but of a thick tuft of them, ſpreading every way to a conſiderable length, from the ſeveral parts of one principal, ſlender, and long body.

The leaves riſe in a little cluſter, but rarely more than ſix or ſeven together: they have long footſtalks, and ſtand more upright than in the *common ſundew*: the leaves themſelves are roundiſh, but approaching to oval, and are of a thick, fleſhy ſubſtance: they are covered with ſhort and ſtiff, yellow hairs, and generally have drops of a tranſparent liquor on them in the heat of the day.

The ſtalk is naked, ſlender, upright, and four inches high.

The flowers grow at the top in a ſeries of eight or ten together; and they open more freely, and ſtand longer, than thoſe of *common ſundew*: they are ſmall and white.

The ſeed-veſſels are oblong, and the ſeeds numerous and roundiſh.

It is common on bogs, with the former, but is overlooked. It flowers in July.

Ray calls it *Rorella rotundifolia perennis.*

3. Small longiſh-leaved perennial Sundew.

Rorella puſilla longifolia perennis.

The *common ſundew* is ſometimes obſerved to have the leaves approaching to an oblong form, and has thence been divided, by Caſpar Bauhine and others, into two ſpecies, the latter called *ros ſolis ſolo oblongo*; but that is only a variety of the common kind: the plant here treated of differs much more obviouſly and eſſentially, and is a truly diſtinct ſpecies.

The root is a great tuft of thick, black, and crooked fibres.

The

The leaves riſe in a large tuft twenty or more together: they are of an oblong figure, ſmalleſt at the baſe, and thence gradually widening to the extremity, where they are rounded and obtuſe; and they are placed on long, ſlender footſtalks.

They are covered with ſtiff, long, yellow hairs, and riſe up more erect than the leaves of any other ſpecies.

The ſtalk is ſingle, naked, purpliſh, and not above three inches high: it rarely divides, but uſually has a long ſeries of flowers ſtanding all on one ſide: theſe are white and ſmall.

The ſeed-veſſel is large and oval; and the ſeeds are ſmall, numerous, rediſh, and nearly round.

It is found on wet parts of heaths, and flowers in May.

Ray calls it *Rorella longifolia perennis.*

This author, in compliance with the cuſtom of others, has ſet down the variety of the *common ſundew* with longiſh leaves; but declares his doubts as to its being a diſtinct ſpecies: this, on the contrary, he marks as a certainly diſtinct ſpecies, and different abſolutely from that.

4. Great long-leaved Sundew.

Rorella major longifolia.

This, like the two former, is a perennial ſpecies.

The root is compoſed of innumerable, ſlender, crooked fibres, and ſpreads a great way under the ſurface.

The leaves riſe in a cluſter, and are long and narrow: they are placed on very long, ſlender footſtalks, and naturally ſtand very upright; but the weight of the leaf, when charged with its moiſture, and the extream weakneſs of the ſtalk, occaſions its frequent drooping.

The ſtalk riſes in the centre of this tuft; and is naked, ſlender, and eight or ten inches high: it is of a purpliſh colour, as are alſo the leaves, and it rarely divides even at the top.

The flowers ſtand in a ſhort ſpike at the ſummit: they are larger than in the preceding ſpecies, and are white; but they rarely open widely.

The ſeed-veſſel is oval and large; and the ſeeds are numerous, and very ſmall.

It is found on wet heaths in our northern counties; and flowers in June.

Ray calls it *Rorella longifolia maxima.*

All theſe ſpecies have the ſame medicinal qualities.

What we know with certainty of them is, that in external uſe they are very dangerous; and, as it is ſaid, that taken internally they are very hurtful to cattle, we are told that, in the form of a diſtilled water, they are highly cordial and reſtorative; but at preſent they are diſuſed in regular practice; nor is it likely that ever they deſerved the character that has been given of them in that reſpect.

The leaves, bruiſed and applied to the ſkin, act as an eſcharotick: they are more violent than the leaves of the ſharpeſt crowfoots, and bring on ſuch inflammations as are not eaſily removed; and our people in the country are ſo convinced of their deſtructive qualities, when eaten by ſheep, that it is vulgarly known among them by the name of *red rot*.

The Italians uſe it to this day, among many other ingredients, in their *liqueurs*, or fine cordials; and the ladies in the country, with us, yet admit it among other ingredients, in the ſame manner, into their family waters.

It is probable that the virtues aſcribed to it in theſe are owing to the other ingredients; and that its own pernicious qualities do not riſe in diſtillation.

DIVISION II. FOREIGN SPECIES.

Graſſy-leaved Sundew.

Rorella foliis gramineis.

The root is ſmall, long, and furniſhed with a few fibres.

The leaves are very numerous, and riſe in thick tufts: they grow upright; they have no footſtalks; and, when young, they frequently curl ſpirally at the ends: they are very long, and extremely narrow, round on the back, hollow in front, and covered with long hairs.

The ſtalk riſes in the midſt of this tuft, and is ſlender, and tolerably upright.

It is not ſo tall as the leaves; and is not naked, as in the ſeveral kinds that are natives of our country, but has two or three leaves upon it, placed at diſtances alternately, and of the ſame ſhape with thoſe from the root.

The flowers are ſmall and white; and the ſeed-veſſel is large and oval.

The ſeeds are ſmall and brown.

It is found on damp grounds in Portugal, and flowers in July.

Plukenet calls it *Ros ſolis luſitanicus foliis aſphodeli minoris.*

Its qualities are not certainly known.

GENUS II.

SAXIFRAGE.

SAXIFRAGA.

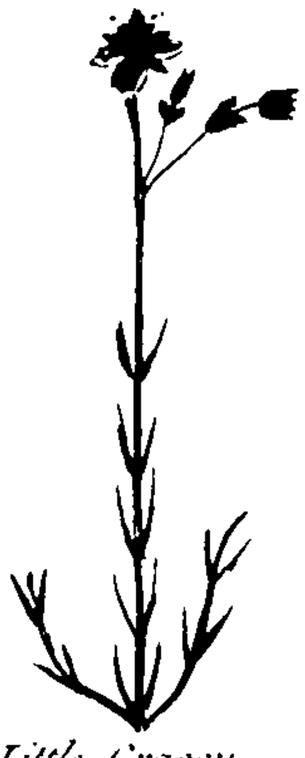
THE flower is compoſed of five petals, which are narrow at the baſe, and broader to the end: the ſeed-veſſel is of an oval figure, but has a double beak: the cup is ſmall, it is formed of a ſingle piece, divided into five ſegments, and it remains with the ſeed-veſſel.



Plantain leavd Chickweed



Common Stichwort



Little Grassy leavd Chickweed



Cluster leavd Chickweed



Large fruited Sea Chickweed



Procumbent narrow leavd Sea Chickweed

Small flowerd Water Chickweed



Round leavd creeping Chickweed



Large fruited Rock Chickweed



Great Chickweed with Serrated Leaves.



Dwarf early Cerastium



Narrow leavd Cerastium



Creeping Cerastium with great Flowers



Long leavd Cerastium



Common Spurrey



Common Sundew



Roundish leavd perennial Sundew



Small lonatish leavd perennial Sundew



Great long leavd Sundew



Grassy leavd Sundew

Linnæus places this among the *decandria digynia*; the threads being ten in each flower, and the ſtyles from the rudiment of the fruit two.

This author joins the *ſaxifrage* and *geum* under the ſame name; but they are diſtinct genera.

We have obſerved that the cup in the *ſaxifrage* is formed of a ſingle piece, divided into five ſegments; but that of the *geum* is formed of five ſeparate leaves: and from this difference of ſtructure, reſults an obvious diſtinction in the placing and appearance of the ſeed veſſel; for in the *ſaxifrage* it grows to the entire part of the cup; whereas in the *geum*, there being no ſuch entire part of the cup, it is ſeparate.

This is an eſſential and obvious character, and it is the more needful to be preſerved, becauſe both the *ſaxifrage* and the *geum* have very numerous ſpecies. The blending theſe together, as Linnæus has done, by confounding the two genera, muſt therefore encreaſe the difficulty of the ſcience.

It is ſingular that Mr. Ray, leſs accurate than Linnæus in his examinations of the more minute parts of plants, though more ſo in his choice of claſſical diſtinctions, ſhould have obſerved this, while the other either overlooked it, or did not pay it that regard which was due to its utility.

DIVISION I. BRITISH SPECIES.

1. Common white Saxifrage.

Saxifraga alba vulgaris.

The root is compoſed of a great many ſmall, oval, or roundiſh tubercles, of a fleſhy ſubſtance and rediſh colour; and of a multitude of long and ſlender fibres, iſſuing from their ſurface, and from a ſmall head, to which they alſo grow.

The leaves riſe in little cluſters, and are of a very ſingular and pretty form: they are rounded, but a little part of the circular figure is wanting where the ſtalk is inſerted; and they are of a fleſhy ſubſtance, a pale green colour, and indented at the edges: their footſtalks are long and ſlender, and they ſtand tolerably erect.

The ſtalk riſes in the midſt of this cluſter, and is round, fleſhy, upright, and about a foot high.

The leaves are placed alternately on it; and they have long footſtalks, and reſemble thoſe from the root.

The flowers are large, beautiful, and of a ſnow white; and they are ſometimes found naturally double: they ſtand on ſhort footſtalks at the tops of the ſtalks, and on little ſhoots riſing from the boſoms of the upper leaves.

The ſeed-veſſel is oval, and has a double beak at the top: the ſeeds are numerous and ſmall.

It is common in our paſtures, and flowers in May. About Wandſor and toward Peckham there is a great deal of it; and, when in flower, it gives thoſe fields a very beautiful aſpect.

C. Bauhine calls it *Saxifraga rotundifolia alba*. J. Bauhine, *Saxifraga alba radice granuloſa*; and others, plainly *Saxifraga alba*.

This plant is an excellent diuretick. An infuſion of the whole herb, roots, leaves, and ſtalks, works powerfully, yet ſafely, by urine, and brings away gravel.

It has been ſuppoſed, by ſome, capable to diſſolve the ſtone in the bladder; but this is an idle thought.

The dried root poſſeſſes the ſame qualities, but in a leſs degree. This is what the druggiſts uſed to ſell under the name of *ſaxifrage* ſeed; the *granules*, ſeparated and dried, which was the uſual way, having ſomething of the appearance of a ſeed. The plant loſes a great deal of its virtue in drying; and it is great pity that it is not to be had during a longer part of the year freſh; for it is worthy to be much more uſed than it is.

2. Rue Whitlow graſs.

Saxifraga foliis digitatis.

The root is compoſed of a few ſmall threads.

The firſt leaves riſe in a little tuft, and are thick, fleſhy, and divided in a fingered manner: their colour is whitiſh, or not unfrequently rediſh; and they have a few ſcattered hairs upon them.

The ſtalk riſes in the midſt of theſe, and is round, thick, fleſhy, of a rediſh colour, and about three inches high.

The leaves ſtand alternately on it, and reſemble thoſe from the root, but they are ſmaller.

The flowers ſtand at the tops of the ſtalks and branches, and are moderately large, and of a beautiful ſnow white.

The ſeed-veſſel is oval, and forked at the top: the ſeeds are numerous, and very minute.

It is common on old walls and the tops of houſes; and flowers early in ſpring.

C. Bauhine calls it *Sedum tridactilytes tectorum*. Others, *Saxifraga annua verna humilior*.

Our common Engliſh name of *rue whitlow graſs* is a very indeterminate one: we ſhould do much better to call it *low ſpring ſaxifrage with fingered leaves*.

3. Trifid leaved Saxifrage.

Saxifraga pumila trifido folio.

The root is ſmall, oblong, and furniſhed with a few fibres.

The leaves riſe in a thick tuft; and, as they are very fine, and thick ſet, they have a moſſy appearance; whence ſome have named the plant *moſſy ſengreen*.

The leaves, when examined ſeparately, are oblong, of a pleaſant green, and divided into three parts at the top.

The ſtalks are numerous, ſmall, upright, and three or four inches high.

The leaves on them are placed irregularly, and are few and ſmall.

The flowers ſtand at the tops of the ſtalks, and are of a beautiful ſnow white.

The ſeed-veſſel is oblong, and ſplit at the end; and the ſeeds are very minute.

It is a native of the Welch mountains, and flowers in May.

Ray calls it *Saxifraga muſcoſa trifido folio.* C. Bauhine, *Sedum alpinum trifido folio.* Others, *Sedum ajugæ foliis.*

4. Short-leaved blue flowered Saxifrage.

Saxifraga cærulea foliis brevibus.

The root is long, ſlender, divided, and furniſhed with a few fibres.

The leaves riſe in a thick tuft, and are ſupported on ſhort ſtalks, a great cluſter upon each.

They are oblong, and ſomewhat broad; and of a pale green, pointed at the ends, and undivided at the edges.

The ſtalks which bear the flowers are ſmall and weak.

The flowers are large, beautiful, and blue.

The ſeed-veſſel is roundiſh, but terminates in a forked end; and is full of very ſmall, brown ſeeds.

It is found on the hills in our northern counties, and on the Welch mountains; and it flowers in April.

Ray calls it *Saxifraga alpina ericoides flore cæruleo*; but, though he adopts that name, he declares it to be ill ſuited; the leaves being like thoſe of mother of thyme, rather than of heath. C. Bauhine calls it *Sedum alpinum ericoides cæruleum.*

5. Saxifrage with yellow ſpotted flowers.

Saxifraga floribus luteis guttatis.

The root is ſmall, and compoſed of ſlender fibres.

The ſtalks that firſt riſe from this trail upon the ground, and ſend out roots alſo in many places.

From theſe riſe the ſtalks which bear the flowers.

They are ſmall, upright, round, fleſhy, and four or five inches high.

The leaves are oblong, narrow, and of a fleſhy ſubſtance and pale green colour: they are diſpoſed irregularly on the ſtalk, and are very numerous.

The flowers are ſingular, and very beautiful: they are large, of a bright gold yellow, ſpotted with a deeper yellow: in ſome plants theſe ſpots are very numerous; in others there are fewer; and in ſome there are none: they alſo vary in degree of colour, being very pale in ſome, and very deep in others.

The ſeed-veſſel is oval, and has two horns: the ſeeds are moderately large, and rediſh.

It is found in damp places, and about ſprings, in the northern mountains of England; and flowers in June.

Ray calls it *Saxifraga alpina anguſtifolia flore luteo guttato.* C. Bauhine, *Sedum alpinum flore pallido.*

6. Saxifrage with ſerrated leaves.

Saxifraga foliis ovatis ſerratis.

The root is compoſed of a multitude of thick, black fibres.

The leaves riſe in a tuft from this; and they are large, of an oval figure, and ſharply ſerrated at the edges: they are of a pale green, and frequently their edges turn in; ſo that they appear hollow: they are an inch in length, and two thirds of an inch in breadth; they lie ſpread upon the ground, riſing from the head of the root without any footſtalks.

The ſtalk riſes in the midſt of theſe, and is round, thick, fleſhy, and of a pale green.

It has no leaves, nor is at all branched; and its height is four, five, or ſix inches.

The flowers ſtand at its top in a thick, ſhort, tuft: they are large and beautiful.

The ſeed-veſſel is oval, and ſplits at the top into two horns; and is full of minute ſeeds.

It is frequent on the mountains of Wales, and flowers in May.

Ray calls it *Saxifraga foilis oblongo rotundis dentatis floribus compactis.* Merret, *Sedum ſerratum rotundifolium.*

Theſe plants are ſuppoſed to poſſeſs the ſame virtues with the *common ſaxifrage*; but few of them have been tried.

DIVISION II. FOREIGN SPECIES.

Great Saxifrage with a bulbiferous ſtalk.

Saxifraga major caule bulbifero.

The root is compoſed of a number of tubercles, and many fibres riſing among them.

The firſt leaves are of a roundiſh form, but deeply cut in ſeveral parts, and more ſlightly indented.

They ſtand upon ſhort, rediſh footſtalks, which are fleſhy and firm.

The ſtalk is round, ſingle, undivided, and two feet high.

The leaves are placed alternately, and they are oblong, broad, thick, fleſhy, and very deeply divided.

In the boſom of each leaf, where it is inſerted to the ſtalk, there ſtands a little, fleſhy bulb, or tubercle.

Theſe in all reſpects reſemble thoſe tubercles which grow to the root, and anſwer the ſame purpoſes; for they fall to the ground when the leaves drop, and taking root furniſh new plants.

The flowers ſtand three or four together at the tops of the ſtalks, and are large and white.

The ſeed-veſſel is oval, and ſplit at the top into two horns; and is full of ſmall brown ſeeds.

This is frequent in Germany, and flowers in June. It greatly reſembles our common *Saxifrage*, but is larger, and has the leaves more divided. The experiment has been tried, and the ſeeds of one will not produce the other, which is the beſt teſt to prove them diſtinct ſpecies.

The virtues of this are the ſame with thoſe of the common Engliſh kind; and theſe bulbs from the

the boſoms of the leaves are collected for uſe in Germany. Hence came the miſtake of calling the bulbs of the root ſeeds, theſe having been firſt called by that name, and from their ſituation much more naturally than thoſe at the root.

It is not peculiar to this plant to produce theſe particular parts: the toothwort, to be deſcribed hereafter, and ſeveral others, do the ſame.

GENUS III.

KIDNEYWORT.

GEUM.

THE flower conſiſts of five petals, narrow at the baſe, and broadeſt at the extremity: the ſeed-veſſel is oval, and terminates in a divided top: the cup is compoſed of five little leaves, and remains with the ſeed veſſel, though ſeparate and detached from it.

Linnæus places this genus among the *decandria digynia*, joining it under one common name with ſaxifrage. I have ſhewn, in the character of the preceding genus, how abſolutely and eſſentially they differ in the ſtructure of the cup.

DIVISION I. BRITISH SPECIES.

1. Hairy Kidneywort.

Geum hirſutum.

The root is long, ſlender, and has a few fibres.

The leaves riſe in a ſmall tuft, and ſtand pretty upright: they have no footſtalks; and they are oblong, moderately broad, ſharp-pointed, dented at the edges, of a pale green colour, and hairy.

The ſtalk riſes in the midſt of theſe, and it is ſmall, naked, ſlender, and four inches high.

The flowers ſtand at the top, on long, ſlender footſtalks, and ſpread themſelves into a kind of umbel: they are ſmall and white.

The ſeed-veſſel is ſmall, and the ſeeds are numerous and brown.

It is found on the Welch mountains, and in ſome of the northern parts of England, and flowers in April.

Ray calls it *Geum paluſtre minus foliis oblongis crenatis.*

2. Narrow-leaved yellow Kidneywort.

Geum anguſtifolium luteo flore.

The root is a cluſter of ſlender, but tough fibres.

The leaves riſe from it in a tuft; and they are oblong, narrow, and ſmooth: they are of a fleſhy ſubſtance, and pale green colour.

The ſtalk riſes in the center of theſe, and is round, ſlender, upright, and of a pale green, often rediſh.

The flowers are very beautiful: they are compoſed of five yellow petals, pointed, and beautifully dotted with orange-colour.

The ſeed-veſſel is divided into two parts at the top, and the ſeeds are ſmall and brown.

It is found on the hills in our northern counties, and flowers in Auguſt.

Ray calls it *Geum anguſtifolium autumnale flore luteo guttato.*

3. London Pride.

Geum foliis ſubrotundis crenatis.

The root is long, ſlender, and furniſhed with a few fibres.

The leaves riſe in a tuft, and are of a roundiſh figure, dented about the edges, and of a pale green.

The ſtalk riſes in the midſt of a regular and beautiful tuft of theſe, and is round, ſlender, rediſh, naked, and a foot high.

The flowers ſtand in great numbers on branches ſent out from the upper part of the ſtalk, and they are ſmall, but, when examined nearly, very beautiful: they are ſpotted in a moſt elegant manner with crimſon.

The ſeed-veſſel is ſmall, and terminates in a double point, and the ſeeds are minute and numerous.

It is wild on the mountains of Ireland; whence it has been brought into our gardens. It flowers in July.

Ray calls it *Geum folio ſubrotundo majori piſtillo floris rubro.* We, *London Pride*, or *None ſo pretty.*

DIVISION II. FOREIGN SPECIES.

1. Long-leaved Kidneywort.

Geum longifolium.

This is a moſt elegant plant.

The root is long, ſlender, and furniſhed with a few fibres.

The leaves are numerous, and very beautiful: they are long, narrow, and rounded at the ends: they are of a pale green, and they have a thin ſilvery edge of a cartilaginous ſubſtance all round them, which is beautifully ſerrated: they lie ſpread in a circular manner on the ground, and the ſtalk riſes in the centre.

This is round, firm, upright, and of a pale green.

There are generally two or three leaves upon it of the ſame ſhape with thoſe from the root, and they ſtand irregularly, and at great diſtances.

The flowers are large, beautiful, and ſnow white: they grow in a tuft at the top of the ſtalk.

The ſeed veſſel is ſmall, and ends in two points.

It is full of ſmall brown ſeeds.

It is a native of the mountains in Germany, and flowers in July.

Moriſon calls it *Sedum ſerratum album briorne marginibus argenteis.*

2. Kidneywort, with white dotted flowers.

Geum floribus albis punctatis foliis ſerratis.

The root is compoſed of a few ſlender, but very long and tough fibres, riſing from a ſmall head.

The leaves ſpread themſelves upon the ground in little tufts: they are oblong, broad, and very deeply ſerrated: they are narrow at the baſe, broad toward the other end, and terminate in a ſharp point.

The ſtalk riſes in the centre, and is round, firm, upright, and a little hairy, as are alſo the leaves.

There are no leaves on the ſtalk.

The flowers are ſmall, but very beautiful: they ſtand in a little tuft at the top of the ſtalk, and are of a ſnow white, beautifully ſpotted.

The ſeed-veſſel is oval, and has a double point.

The ſeeds are very ſmall.

It is a native of Switzerland, and flowers in April.

Plukenet calls it *Sanicula myoſotis floribus albicantibus fere umbellatis.*

3 Kidneywort, with tufted flowers.

Geum floribus faſciculatis.

The root is compoſed of a number of black fibres.

The leaves riſe in a tuft, and are oblong, broad, of a pale green, and ſerrated at the edges.

The ſtalk is round, upright, and of a reddiſh colour, and is in a manner naked: there are no leaves on its lower part, and only a few rudiments of leaves where the branches riſe that bear the flowers.

Theſe are ſmall, white, and cluſtered in little tufts at the ends of the ſeveral branches that grow from the upper part of the ſtalk.

The ſeed-veſſel is oval, and ſplit at the end into two parts, and the ſeeds are ſmall.

It is a native of North America, and flowers in Auguſt.

Plukenet calls it *Sanicula Virginiana alba folio oblongo nuceronato.*

GENUS IV.

GRASS of PARNASSUS.

PARNASSIA.

THE flower conſiſts of five petals, which are broad, and regularly ſpread open: the ſeed-veſſel is of an oval ſhape, but marked with four ſlight ridges, and is compoſed of four valves: the cup is formed of a ſingle piece, divided into five long ſegments, and remains when the flower is fallen.

Linnæus places this among the *pentandria tetragynia*; the threads ſuſtaining the buttons in the flower being five, and the ſtigmata riſing from the rudiment of the fruit four.

The uſual name of the genus was *gramen Parnaſſi*; and this Linnæus has very judiciouſly ſet aſide, reducing it, after C. Bauhine, to one word, *Parnaſſia*; the word *gramen* having no alliance with the nature of the plant. Of this genus there is but one known ſpecies, and that is a native of Britain, as well as moſt parts of Europe.

Graſs of Parnaſſus.

Parnaſſia.

The root conſiſts of a ſmall head, and an innumerable quantity of long and ſlender fibres.

The leaves are numerous, and extremely beautiful; each has its long, ſlender footſtalk, and the ſhape is heart-faſhioned: they riſe pretty upright in a large tuft, and are of a deep green.

The ſtalks are numerous, ſlender, round, upright, and a foot high.

Each has only a ſingle leaf upon it, and ſuſtains a ſingle flower.

The leaf grows about the middle of the ſtalk, and ſurrounds it at the baſe: its ſhape is the ſame with that of thoſe from the root, but it has no footſtalk.

The flower is very large and beautiful: it is white, and elegantly ſtriated; and there are a multitude of filaments, no leſs than ſixty-three in all, beſide the proper threads, which are only five: theſe are a great addition to the beauty of the flower.

They riſe from certain glandules in the lower part of the flower: there is one on each petal, and it is hollow, and heart-faſhioned; and from this there riſe thirteen of theſe threads, taller as they proceed up the margin, and each having its top terminated by a little globe.

Theſe glands Linnæus calls the *nectaria*, and makes the eſſential character of the genus: they are, indeed, extremely ſingular, as well as beautiful.

The ſeed-veſſel is oval, and edged in four places; and the ſeeds are ſmall and oval.

It is found on boggy ground in many parts of the kingdom, and flowers in June.

C. Bauhine calls it *Parnaſſia flore albo ſimplici.* Others, *Gramen Parnaſſi vulgare*, and *Gramen Parnaſſi minus*. The flower is ſometimes naturally double.

The virtues of this plant have not been tried; but the farmers think it hurts their ſheep.

GENUS



Common White Saxifrage.



Rue Wallow Gnafs.



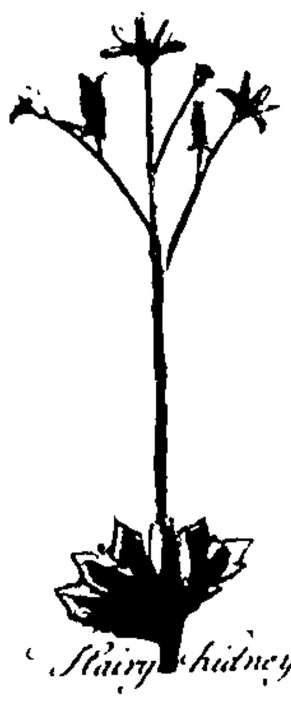
Saxifrage with yellow spotted Flowers.



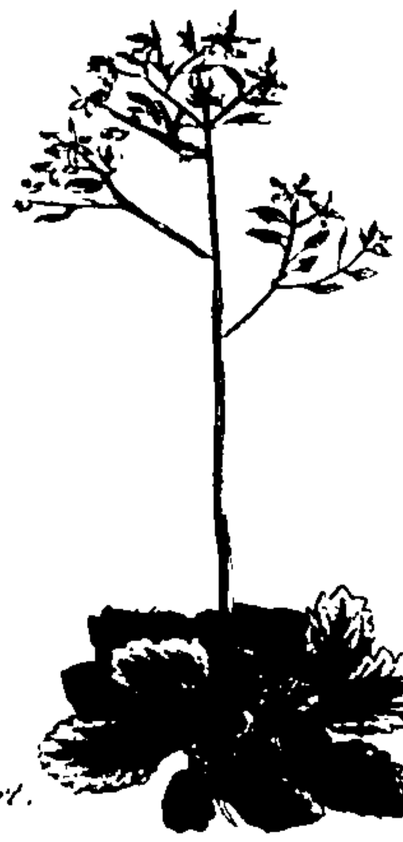
Saxifrage with oval serrated Leaves.



great Saxifrage with a bulbiferous Stalk.



Hairy Kidneywort.



London Pride.



Long leaved Kidney-wort.



Kidney wort with white dotted Flowers.



Kidney wort with tufted Flowers.



Grass of Parnassus.



Common Flax.



great flowered perennial Flax.



Common Purple Flax.



Mountain Flax.



great hairy Flax.



Small yellow Flax.



Annual yellow Flax.

GENUS V.

FLAX.

LINUM.

THE flower is compoſed of five petals, narroweſt at the baſe, and broadeſt upwards; and it opens regularly, and is hollow: the ſeed-veſſel is of a rounded figure, but has five ridges, and a point at the top: it is formed of five valves, and has ten cells: the cup is ſmall; it is compoſed of five oblong leaves, and remains when the flower is fallen.

Linnæus places this among the *pentandria pentagynia*; the threads in the centre of the flower being five, and the ſtyles from the rudiment of the fruit alſo five.

That author includes in this genus the *little rupturewort*, or all ſeed called *radiola*. This is confounding plants alogether diſtinct; for this little herb is quite different in genus, and has its received and well known name.

Linnæus contradicts his own ſyſtem in joining this plant with the *linum*; for he eſtabliſhes the claſſical character under which that genus is arranged to be the having five threads in the flower, and five ſtyles; whereas the threads in this, and the ſtyles alſo, are only four.

Of this Linnæus was not ignorant: he has mentioned that one ſpecies wants a fifth part of the number in theſe parts of the flower: indeed, it wants, not only one of each of theſe parts, but one of the petals alſo; for it has only four of theſe, as of the others.

It is, from this, evident that the plant neither is of the ſame genus, which is determined by the petals, nor of the ſame claſs, which is fixed by Linnæus from the threads, with flax wherewith he confounds it. He ſays, ſome have been deſirous, becauſe of it difference in the number of the petals, threads, and ſtyles, to conſtitute a new genus of it, and ſeparate it from the flax; but he adds, *this nature abhors*. I muſt utterly differ with him in this matter: it is what nature dictates and directs, in the plaineſt manner, and under the moſt obvious characters. This determination of that author is therefore raſh and contradictory to reaſon in itſelf, and it is very unhappy in its conſequences for his ſyſtem; for if nature abhors the ſeparating plants that are in obvious characters allied to one another, on account of ſome difference in the number of the threads, and other minute parts of the flower, then nature abhors his whole ſyſtem of botany. We have ſhewn in every claſs how he removes and ſeparates plants perfectly allied to one another, becauſe they happen to differ in the number of threads in the flower. This is that making a ſeparation from the variation of number in like plants of which we have complained ſo often; which his method impoſes; and which, he ſays here, is abhorrent to nature.

This is not the only inſtance wherein the preſent genus of plants ſhews us the uncertainty and error of Linnæus's method: others, which he has in his laſt work, his *Species Plantarum*, attributed to the preſent claſs, as perfectly differ from its laws.

He has there introduced the yellow bellflower among the ſpecies of flax, though he has eſtabliſhed in the generical character, that the flax has five petals in the flower, and in that plant it conſiſts only of one: he calls this doubtful; but three could be no doubt, from this plain circumſtance.

The *little yellow flax* is alſo placed here among the reſt, and properly enough in nature, but unhappily by this author, who has attributed five ſtyles to the flax, whereas this has but three.

I ſhall enter no farther into this diſquiſition: I am to write a hiſtory of plants, and not a criticiſm upon the works of Linnæus; though ſo much as this, though written with pain, cannot be avoided.

DIVISION I. BRITISH SPECIES.

1. Common Flax.

Linum vulgare.

The root is long, ſlender, and hung with a few fibres.

The ſtalk is round, firm, upright, and of a pale green: it has ſcarce any branches, and is three feet high, and very upright.

The leaves ſtand irregularly, and are numerous: they are long, narrow, and of a freſh green: they have no footſtalks; they are not at all divided at the edges; and they are pointed at the ends.

The flowers are large, and of a beautiful ſky-blue.

They grow in conſiderable numbers on the tops of the ſtalks, and on ſhort branches riſing for their ſupport juſt below the top of it.

The ſeed-veſſel is large, and the ſeeds are alſo large, numerous, and of a gloſſy brown.

We ſee it naturally in our paſtures, and about road-ſides in ſome parts of the kingdom, and cultivated in fields in many others: whether the wild plants are properly native of this iſland or riſe from ſcattered ſeeds it is not eaſy to ſay.

Some have divided the *common flax* into two ſpecies on this account, calling the one the *manured flax*, and the other the *wild flax*; but the plant is the ſame, whether it grow naturally, or be raiſed by art; that which is cultivated will be larger: there is no other difference.

C. Bauhine and others call it *Linum ſativum*.

The uſe of the ſtalks of this plant in making linen is ſufficiently known. The thready part is ſeparated from the reſt, beat and combed till it

hangs in long fine threads, and then bleached to a whiteneſs.

The virtues in medicine are very conſiderable: for this purpoſe the ſeeds alone are uſed.

They are emollient and diuretick. A tea, made by pouring boiling water upon them unbruiſed, is pleaſant, and is of excellent ſervice in diſorders of the breaſt and lungs. It alſo allays heat of urine, and brings away gravel.

Outwardly it makes an excellent emollient fomentation; and is an ingredient in many of the ointments, and other external remedies, in our diſpenſatories.

The oil, drawn from the bruiſed ſeeds without heat, is excellent in diſorders of the lungs, and in pleuriſies and peripneumonies.

Externally it is alſo an anodyne and reſolvent in a great degree; indeed, ſuperior to almoſt any other oily medicine.

2. Great-flowered perennial Flax.

Linum perenne flore majore.

This is a *wild Flax*, very different from the common manured kind; being a hardy, perennial, and deep rooted plant.

The root is long, thick, woody, and hung with many fibres.

The ſtalks are numerous, round, upright, hard, and a foot and half high: they are brown and brittle; and are ſeldom at all branched.

The leaves are oblong, narrow, ſharp-pointed, and of a pale green: they are very numerous, and are placed irregularly on the ſtalks.

The flowers grow in a thick tuft at the tops of the branches: they are large, and of a beautiful blue.

The ſeed-veſſel is very large, and the ſeeds alſo large.

It is frequent on the borders of fields in many parts of England, and flowers in July.

Ray calls it *Linum ſylveſtre cæruleum perenne erectius flore et capitulo majore.*

The flower is ſometimes white.

3. Procumbent Flax with ſmall flowers.

Linum procumbens flore minore.

The root is long, thick, and brown: it is furniſhed with many fibres, and endures from year to year.

The ſtalks are numerous, round, ſlender, and weak: they lie in part upon the ground, and in part riſe up.

The leaves are long, narrow, and of a bluiſh green; and they ſtand irregularly, and in great numbers, on the ſtalks.

The flowers ſtand on the tops, and on ſlender footſtalks riſing from the boſoms of the upper leaves: they are ſmaller than thoſe of the *common flax*, but of the ſame celeſtial blue.

The ſeed-veſſels are ſmall, hard, brown, and ſharp-pointed; and the ſeeds are brown.

It is found in barren places in our ſouthern counties; and flowers in July.

Ray calls it *Linum ſilveſtre perenne procumbens flore et capitulo minore.*

4. Narrow-leaved purple Flax.

Linum anguſtifolium flore purpuraſcente.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalks are numerous, round, ſlender, and of a pale green: they are very upright, and full of leaves, placed with perfect irregularity from the bottom to the top.

Theſe are long, narrow, and ſharp-pointed: they have no footſtalks, and are of a pale green.

The flowers are large, and very beautiful: they ſtand at the tops of the ſtalks, and their colour is a pale purple.

The ſeed veſſel is ſmall, and the ſeeds are oval, and of a pale brown.

It is found in many parts of England near the ſea-coaſt; and flowers in June.

The flowers vary extremely, in their tinge of purple: ſometimes they are deeper; ſometimes paler; and ſometimes nearly white: the colour is ſometimes diffuſed all over them; and in others it is only laid on in lines, or ſtreaks, toward the bottom of the petals, which grow fainter, and die off as they come nearer the tips.

C. Bauhine calls it *Linum ſylveſtre anguſtifolium floribus dilute purpuraſcentibus ſive carneis.*

5. Mountain Flax.

Linum foliis brevibus.

This is a ſingular plant; very unlike the other ſpecies of *flax*, but properly and truly one of the kind.

The root is long, ſlender, white, and hung with many fibres.

The ſtalks are numerous, round, firm, upright, and ten inches high: they have no branches till toward the top, where they divide, by twos, into a large, ſpreading head.

The leaves are ſhort and ſmall: they are of a duſky green, and of a firm ſubſtance.

The flowers are ſmall and white; and the ſeed-veſſels are large, and full of oval ſeeds.

It is common on dry paſtures, and flowers in July.

C. Bauhine calls it *Linum pratenſe floſculis exiguis.* Others, *Linum catharticum.* Our common people call it *Purging flax*, *Mountain flax*, and *Mill mountain.*

It is a great medicine with the country people for many diſorders, the rheumatiſm, dropſies, and other complaints ariſing from obſtructions.

They give it boiled in ale. A ſmall handful, boiled in a pint of that liquor, is a doſe for a ſtrong man. It always operates violently by ſtool, and not unfrequently alſo by vomit.

DIVISION II. FOREIGN SPECIES.

1. Great hairy Flax.

Linum cæruleum hirſutum.

The root is ſmall, oblong, divided, and furniſhed with a few fibres.

The ſtalks are numerous and firm: they are three feet high, round, hard, brown, not much branched; yet, not altogether ſo ſingle as in the *common flax*.

The leaves are oblong, conſiderably broad, of a pale green colour, and hairy.

They are placed irregularly on the ſtalks, and cloath them pretty thick all the way up.

The flowers grow all the way up the upper branches, and the tops of the ſtalks: they are very large, and of a beautiful blue.

The ſeed-veſſel is large and pointed; and the ſeeds are oval and of a pale brown.

It is common in Germany, and flowers in June.

C. Bauhine calls it *Linum ſilveſtre latifolium hirſutum cæruleum.*

2. Small yellow Flax.

Linum parvum flore luteo.

The root is long, ſlender, and edged with fibres.

The ſtalks are numerous, ſlender, and ſix or eight inches high: they frequently divide into two from the baſe; but they are rarely branched upwards.

The leaves are ſmall, oblong, narrow, and ſharp pointed: they are placed irregularly on the ſtalks, and are perfectly ſmooth, and of a pale green.

The flowers are ſmall, and of a gold yellow: they grow at the tops of the ſtalks, and on ſlender footſtalks riſing from the boſoms of the upper leaves.

Theſe generally ſplit into two at the extremity.

The ſeed-veſſel is ſmall and pointed.

The ſeeds are oval and brown.

This is the ſpecies which has only three ſtyles in the flower; whereas Linnæus's character gives all the *flaxes* five.

It is a native of the ſouth of France, and flowers in June.

C. Bauhine calls it *Linum ſylveſtre minus flore luteo.*

3. Broad leaved yellow Flax.

Linum latifolium luteum ad genicula floridum.

The root is ſmall, oblong, divided into ſeveral parts, and furniſhed with many long fibres.

The ſtalk is round, firm, and upright, but jointed, and ſtraddly bowed from joint to joint.

The leaves are ſhort and broad: they have no footſtalks, but are ſmall at the baſe, broadeſt in the middle, and pointed at the ends; and they are placed irregularly on the ſtalks.

The flowers are moderately large, and of a pale yellow: they grow cloſe to the ſtalks at its ſeveral joints, or at the inſertions of the upper leaves.

The ſeed-veſſel is large, roundiſh, and pointed; and the ſeeds are brown.

It is common in Italy, and flowers in Auguſt.

C. Bauhine calls it *Linum luteum ad ſingula genicula floridum.*

The virtues of theſe plants are not certainly known; but the taſte of their ſeeds ſeems to ſhew they have all the ſame qualities with the *common flax*.

GENUS VI.

CRANESBILL.

GERANIUM.

THE flower conſiſts of five petals. The ſeed-veſſel is long and ſlender: it is very ſingular; it is properly a cruſt which envelops the ſeveral ſeeds, and which has a top extended along the ſtyle. As its form is ſingular, ſo is its manner of opening; for it ſplits in ſeveral parts from the baſe to the extremity of the ſtyle. The ſeeds are kidney-ſhaped. The cup is compoſed of five leaves, and remains when the flower is fallen.

Linnæus places this among the *monadelphia decandria*; the threads in the flower growing together in one body, and being diſtinctly ten in number.

This is one of thoſe claſſes of that author which we call, with reaſon, perfectly artificial; for this coalition of the threads in a flower is not certain enough to become the mark of a claſſical diſtinction, nor appears to have been regarded by nature ſo ſtrictly as thoſe parts and circumſtances in all plants are, on which a natural method is to be founded.

Linnæus is obliged to acknowledge this, even in the moſt plain terms, in relation to the preſent genus.

After having ſeparated it from all thoſe other genera to which it is naturally allied, by placing it among theſe *monadelphia*, becauſe its ſtamina grow into one body, he owns that in ſome of the ſpecies the flower is plainly of the *diadelphia* claſs; that is, the ſtamina unite into *two* bodies.

This divides the genus again: the plants whoſe threads unite into one body make the ſixteenth claſs in Linnæus's method; and thoſe whoſe threads unite into two bodies make the ſeventeenth: therefore, after the *craneſbills* being taken out of their natural place, the genus itſelf is to be divided,

and ſome of the ſpecies are to be put into one claſs, and others into another. This, nature abhors, indeed.

Unhappily for this author's ſyſtem, the *craneſbills* are characteriſed more thoroughly by their ſingular fruit than any other genus of plants whatever: they are therefore incapable of being thus ſeparated; nor, though their difference in this ſlight reſpect ſeemed to render it neceſſary, has the author ventured to do it: he leaves it a blemiſh in his ſyſtem.

Indeed, the determination of reaſon is plainly this, *That ſyſtem which ſeparates like genera, and places in diſtinct claſſes the plants evidently of the ſame genus, is falſe.* This cenſure falls directly upon the method of this celebrated author; and theſe two claſſes, the *monadelphia* and *diadelphia*, are proved by this inſtance, as others by thoſe before-named, to have no real foundation in nature.

DIVISION I. BRITISH SPECIES.

1. Herb Robert.

Geranium pedunculis biflоris calycibus hirſutis.

The root is ſmall, long, divided, and hung with many fibres.

The leaves that riſe immediately from it have long, weak, hairy footſtalks of a red colour.

The leaves themſelves are large, and beautifully formed: they are firſt divided into three or five parts, and theſe are afterwards deeply indented. They are of a tender ſubſtance, of a pale green, and lightly ſprinkled over with white hairs.

The ſtalks are numerous, round, rediſh, and jointed: they grow in the centre of this tuft of leaves, and are a foot or more in length, but not perfectly upright: the leaves from theſe are divided in the ſame manner with thoſe from the root, and are of the ſame pale green.

The flowers are moderately large, and of a bright red: they grow on ſlender pedicles, each ſpliting toward the end, and ſupporting two of them.

The fruit, or beak, is long, ſlender, and covered at the baſe where the ſeeds lie by the cup, which is hairy.

The whole plant has a very ſingular, but not diſagreeable ſmell.

Toward the end of ſummer it frequently becomes throughout of a bright red colour, leaves, and ſtalks, and even the beaks.

It is common under hedges, and flowers in June.

C. Bauhine calls it *Geranium Robertianum*; and almoſt all the ſucceeding writers copy the ſame name.

This plant is an aſtringent of a very powerful kind; but is not enough known to thoſe who might make its virtues a benefit to mankind. The farmers give it their cattle when they make bloody urine, or have bloody ſtools; and this with certain ſucceſs: it ſhould be brought into uſe in the ſhops on the ſame occaſions.

2. Shining knotty Craneſbill.

Geranium lucidum nodoſum foliis diſſectis.

The root is long, ſlender, divided, and of a red colour.

The firſt leaves are numerous, and they are ſupported on ſlender footſtalks: they are divided deeply into five parts, and thoſe again cut in at the edges: they very much reſemble the leaves of the *common herb Robert*; but they are not hairy, as in that ſpecies, but ſmooth and ſhining, as are alſo their ſtalks.

The main ſtalks riſe among them, and are more than a foot in length, but not upright: they are red, of a ſhining ſurface, and have frequent knots, which are large, and more gloſſy than the reſt.

The leaves on it reſemble thoſe from the root.

The flowers are ſmall, and of a faint red; and the ſeed-veſſel, or beak, is long and ſlender.

It is frequent about our ſea-coaſts, and in many inland places. I have obſerved it among buſhes on the right-hand of the road to Chicheſter. It flowers in June.

Ray calls it *Geranium lucidum ſaxatile foliis geranii Robertiani.*

It has the ſmell of the former, and probably its virtues.

3. Dove's-foot Craneſbill.

Geranium columbinum vulgare.

The root is long, thick, divided into ſeveral parts, and furniſhed with fibres.

The leaves riſe in a large tuft: they have long, weak footſtalks, of a pale whitiſh green: the leaves are roundiſh and ſmall; they are divided into eight or ten deeper ſegments at the edge, and theſe are again notched; but they are leſs cut in than thoſe of many other of the *dovefoots*: they are of a pale green, and have ſomething of the appearance of the mallow leaf in miniature.

The ſtalks are round, weak, and a foot or more in height: they are numerous, branched, and of a pale green.

The leaves are placed irregularly on theſe; and they reſemble in all reſpects thoſe from the root, but that they are deeper cut at the edges.

The flowers grow in conſiderable numbers at the tops of the ſtalks and branches; and they are of a beautiful purple, and moderately large.

The ſeed-veſſel is ſmall and ſlender; it ſtands encloſed in the cup at the baſe, and that is little and ſmooth.

It is common by way-ſides, and flowers in June.

C. Bauhine calls it *Geranium folio malvæ rotundo.* Others, *Geranium columbinum*, and *Columbinum vulgare.*

Though common enough, it is not ſo frequent as many of the others; and many a young ſtudent has called the next ſpecies by its name.

The place where it is to be found neareſt London is by the ſide of the road from Gray's-Inn lane half a mile from the ſtreet.

4. Great dove's foot Cranesbill with little flowers.

Geranium columbinum majus flore minore cæruleo.

This is the plant many have confounded with the preceding in its name; and, having been taken for the same species, it has been omitted by most writers.

The root is long, slender, reddish, and furnished with many fibres.

The leaves are numerous, and have very long footstalks: they are large, of a rounded form in the whole, but very deeply divided into several parts; and they are of a pale green colour, and covered with a soft silvery down.

The stalk is round, thick, upright, and two feet high: it is also of a greenish colour, though frequently red at the joints, and is covered with the same silvery down as the leaves.

The leaves upon this have long, slender, and weak footstalks, and are much more deeply divided than those from the root.

The flowers stand in considerable numbers towards the tops of the stalks: they are very small, though the plant is so large, and their colour is a faint blue.

The seed vessel, or beak, is long and slender.

It is common by way-sides, and flowers in July.

Ray calls it *Geranium columbinum majus flore minore cæruleo.*

The flower in this species is sometimes white.

Ray found it in this condition near the lead mills on Hackney river, and it is frequent in the same place at this time in the same variation.

5. Dwarf Dove's-foot.

Geranium columbinum humile flore minimo cæruleo.

The root is oblong, slender, and divided, and has several fibres.

The first leaves are supported on long footstalks, five or six together, from the root; and they are broad and short, deeply divided into about seven parts, and those notched again at the edges.

The stalk is round, slender, upright, and not more than three inches high, several usually rise together; and they are of a pale colour, and seldom much branched.

The leaves on them resemble those from the root, but they are more deeply divided, and have shorter footstalks.

The flowers are numerous, and very small: the petals are divided at the tips, and they are of a faint bluish hue.

The beak is short, sharp, and small; and is enclosed at the bottom in a cup, which is large considering the smallness of the plant.

It is common on ditch sides, and flowers in spring. The shape of the flower and beak shew it plainly to be a distinct species; not, as might appear otherwise, a starved plant of some of the other kinds.

Ray calls it *Geranium columbinum humile flore cæruleo minimo.*

6. Dove's-foot Cranesbill with deep cut leaves.

Geranium columbinum foliis profunde sectis.

The root is long, thick, divided into several parts, and hung with numerous fibres.

The leaves that rise from it are supported on tall footstalks; and they are large, of a figure approaching in the whole to round, but divided by deep and frequent segments into very small and narrow parts.

The stalk is round, thick, upright, and a foot and half high: it is of a pale whitish colour, and very much branched.

The leaves on the stalk resemble those from the root, but are of a paler green, and more deeply divided.

The flowers are small, and of a bright red: they stand in great numbers toward the tops of the branches.

The beaks are large and long.

It is common about the hedges of dry pastures, and flowers in June.

C. Bauhine calls it *Geranium columbinum tenuius laciniatum.* J. Bauhine, *Gruinale folio tenuiter diviso.*

The flowers in this are also sometimes white.

7. Dove's-foot Cranesbill with flowers on long footstalks.

Geranium columbinum dissectis foliis pediculis florum longissimis.

The root is long, slender, and hung with a few fibres.

The first leaves are numerous, and are placed on long footstalks: they are of a form approaching to round, deeply divided into segments, and of a dark dusky green.

The stalk is round, upright, firm, branched, and smooth: it is of a pale colour, and jointed at distances.

The leaves on it are like those from the root, but smaller; and they are also perfectly smooth, and deeply divided.

The flowers are supported on very long and slender footstalks; and they are of a bright red: they are moderately large, and the petals are slightly divided.

The beaks are large.

It is common in dry pastures, and flowers in July.

Ray calls it *Geranium columbinum dissectis foliis pediculis florum longissimis.*

8. The greatest dove's-foot Cranesbill.

Geranium columbinum maximum.

The root is long and large, of a red colour, and furnished with numerous fibres.

The first leaves rise in considerable number, and are supported on very long footstalks: they are of a rounded figure, large, and deeply divided into numerous, narrow, and pointed segments.

The stalk is round, thick, upright, and three feet high.

The leaves on it are like those from the root, but more deeply divided; and the whole plant is covered with a silvery down.

The flowers are large and red, and they stand on footstalks, longer than those of the other kinds, but not at all comparable to those of the last species.

The beaks are large, long, and sharp.

It is frequent in our midland counties, and flowers in July.

Some have ſuppoſed it only a variety of the other *dove's-foot with deep cut leaves*; but, on comparing them, they are abſolutely diſtinct.

Ray calls it *Geranium columbinum maximum diſſectis foliis.*

9. Bloody Craneſbill.

Geranium hæmotides.

The root is long, thick, and divided into ſeveral parts.

The leaves that riſe from it are numerous, ſmall, and deeply divided: they have moderately long footſtalks, and they are of a duſky green. Their ſegments are ſingle and ſharp-pointed.

The ſtalks are numerous, round, weak, and rediſh: they are a foot long, but not very erect; and are greatly branched.

The leaves on theſe are like thoſe from the root; and they have, in the ſame manner, moderately long footſtalks.

The flowers do not grow from the tops of the ſtalks, but riſe from the boſoms of the leaves: they have very long, ſlender footſtalks, and only one flower is ſupported on each: this is very large, and of a deep blood red.

The beak is ſmall, and is ſurrounded at its baſe by a large cup.

It is found among buſhes in the ſouthern counties of England, but is not common.

It flowers in July.

C. Bauhine calls it *Geranium ſanguinarium.* Others, *Geranium ſanguineum*, and *Hæmatodes.*

10. Pale hairy-leaved bloody Craneſbill.

Geranium hæmatodes foliis pallideoribus hirſutis.

The root is long, thick, and furniſhed with numerous fibres.

The leaves that riſe firſt from this are very numerous, and ſupported on long, ſlender footſtalks: their figure approaches to round, but they are deeply divided into narrow ſegments; and they are hairy, and of a pale green.

The ſtalk is ſlender, hairy, whitiſh, and but indifferently able to ſupport itſelf.

The leaves on it are, like thoſe from the root, pale coloured, hairy, and very deeply divided; and they have ſhort footſtalks.

The flowers are large, and of a pale red; and they ſtand on ſeparate long and ſlender footſtalks riſing from the boſoms of the leaves.

The beaks are long and large.

It is found in Cambridgeſhire, and ſome other places, but is not common.

It flowers in July.

Ray calls it *Germanium hæmatodes foliis majoribus pallidioribus & altius inciſis.*

11. Small bloody Craneſbill.

Geranium hæmatodes pumilum.

The root is long, ſlender, and furniſhed with numerous fibres.

The leaves that firſt riſe from it are numerous, ſmall, of a roundiſh figure, but deeply divided into narrow ſegments, and placed on long footſtalks: they are of a duſky green colour, and not in the leaſt hairy.

The ſtalks are numerous, weak, round, and branched: they are ſix or eight inches long, but not perfectly erect.

Their leaves are ſmall, and very deeply divided; and they are of the ſame deep green colour with thoſe from the root, and alſo ſmooth.

The flowers are very large, and very beautiful: they ſtand ſingly on long footſtalks riſing from the boſoms of the leaves; and they are of a pale whitiſh colour, variegated with veins of red.

The beaks are ſmall.

It is found in Lancaſhire and the adjoining counties; and flowers in Auguſt.

Ray calls it *Geranum hæratodes Lancaſtrenſe flore eleganter variegato.*

It has been ſuſpected as only a variety of one of the firſt kind; and the ſeeds have been ſown in gardens to try. In this caſe it becomes larger, but the leaves continue ſmaller, than thoſe of the common kind; and the flower always continues variegated.

12. Crowfoot Craneſbill.

Geranium Batrachoides.

This is a very large and ſpecious plant.

The root is long, thick, and furniſhed with abundance of fibres.

The firſt leaves riſe in a large tuft: they are ſupported on long, ſlender footſtalks, and are large and ſpreading: they are divided very deeply into numerous ſegments, which are again notched at their edges; and they are of a pale green, and hairy.

The ſtalk is thick, firm, upright, two feet high, and very much branched.

The leaves on it are numerous and large, and are divided more deeply than thoſe immediately from the root.

The flowers are numerous, very large, and of a fine blue: they ſtand at the tops of the branches on ſhort footſtalks.

The beaks are long, and not very thick.

It is frequent in paſtures in many parts of England. About Twickenham there is a great deal of it.

It flowers in July.

J. Bauhine calls it *Geranium batrachoides.* Others, *Gratia Dei.*

13. Red-flowered crowfoot Craneſbill.

Geranium batrachoides flore minore rubente.

The root is long, thick, and furniſhed with a multitude of long and crooked fibres.

From this riſe firſt four or five leaves, rarely more: they are large, broad, and of a deep green colour, and ſhining ſurface: they are ſupported on long footſtalks, and are cut into ſeveral diviſions at the edges, but not ſo deeply as thoſe of the former ſpecies.

The ſtalk is round, upright, but ſlender, ſomewhat branched, and a foot and half high.

The leaves that ſtand on it reſemble thoſe from the root, but they are ſmaller, and more deeply divided.

The flowers ſtand at the tops of the ſtalks and branches on ſhort footſtalks, and are conſi-

derably large, but not nearly ſo big as thoſe of the former: their colour is a fine bright red.

The beaks are long and large.

It is found among buſhes in our northern counties; and flowers in Auguſt.

Ray calls it *Geranium batrachoides montanum.* C. Bauhine, *Geranium batrachoides folio aconiti.* Others, *Geranium batrachoides minus.*

14. Shining dove's-foot Craneſbill.

Geranium lucidum ſaxatile columbinum.

The root is long, ſlender, and furniſhed with many fibres.

The firſt leaves in ſhape ſomewhat reſemble thoſe of the *common dove's-foot craneſbill*, but they are of a deep green colour, and ſhining ſurface: they are more groſsly indented, and they ſtand on long, thick, red footſtalks.

The ſtalks riſe among theſe leaves, and they are very irregularly branched, and rudely jointed: they alſo are red and ſhining; their joints are large and knotty; and their branches ſpread with great irregularity: they are a foot and half long, but they do not ſtand very erect.

The leaves on the ſtalks are leſs indented than thoſe at the root, and are of the ſame gloſſy ſurface and dark colour.

The flowers are ſmall, and of a faint red:

The beaks alſo are ſmall.

It is frequent in our northern counties and elſewhere. There is a great deal of it among the buſhes on the right hand of the road to Richmond.

It flowers in June.

C. Bauhine calls it *Geranium lucidum ſaxatile.* Others, *Geranium ſaxatile.*

15. Knotty Craneſbill with trifid leaves.

Geranium nodoſum foliis trifidis.

The root is long, irregular, and creeping.

The firſt leaves are few; and are ſupported on long, ſlender, rediſh footſtalks: they are ſmall, and of a deep green colour and ſhining ſurface: they are each divided into three principal parts, and two ſmaller at the baſe; ſo that theſe are properly quinquifid, though thoſe on the ſtalks are, as the name expreſſes, only trifid: thoſe ſegments of the leaves are long, narrow, and ſharp-pointed; and they are ſharply ſerrated at the edges.

The ſtalk is round, upright, and of a blood red colour uſually; it is divided into many branches in the upper part, and has large, thick, and ſwelling knots at the joints.

The flowers ſtand on ſhort footſtalks at the tops of the branches, commonly two on each footſtalk: they are moderately large, and of a bright red.

The beaks are long and ſlender.

It is found in ſome of our northern counties; and flowers in June.

C. Bauhine calls it *Geranium nodoſum.* Others, *Geranium nodoſum plateau.*

The whole plant frequently becomes in autumn blood red.

16. Black-flowered Craneſbill.

Geranium flore pullo.

The root is long, ſlender, and furniſhed with many fibres.

The leaves that riſe from it are large, broad and angulated: they are placed on long foot-ſtalks, and they are divided by deep ſegments into five or ſix principal parts, which are pointed at the ends, and notched at their edges: they are of a duſky green colour; and often are ſpotted.

The ſtalk is round, firm, very upright, and two feet high: it is of a pale brown colour, and very little branched.

The leaves ſtand irregularly on it, and at diſtances: thoſe toward the bottom reſemble the firſt leaves from the root; but ſuch as grow near the top are divided only into three parts, which are long, narrow, and notched.

The flowers are large and black: they ſtand on ſlender footſtalks on the tops of the branches; and theſe uſually ſplit, and ſuſtain each two flowers.

The beaks are moderately long.

It has been found wild in ſome few parts of England, and of late in Ireland. It flowers in July.

C. Bauhine calls it *Geranium montanum fuſcum.* Others, *Geranium pullo flore.*

17. Sea Craneſbill with undivided leaves.

Geranium maritimum foliis integris.

The root is long, ſlender, divided, and furniſhed with many fibres.

The ſtalks are numerous, thick, jointed, and of a pale green: they are five or ſix inches long, and ſpread every way upon the ground, none of them riſing upright, unleſs by accident: they are thick ſet with leaves, and divided into numerous branches.

The leaves are undivided: they are oblong and broad, obtuſe at the ends, and ſlightly crenated round the edges: they are of a pale green, and they have a great deal of reſemblance to the leaves of betony, only they are ſmaller.

The flowers ſtand on ſhort footſtalks riſing from the boſoms of the leaves, principally toward the ends of the branches: they are ſmall and whitiſh, with a bluſh of red.

The beaks are ſhort and ſmall.

It is frequent on barren, ſandy grounds about the ſea-coaſt; and flowers in June.

Ray calls it *Geranium puſillum ſupinum maritimum althææ, vel potius Betonicæ folio.* Merret, *Geranium betonicæ folio.*

18. Pinnated-leaved Craneſbill without ſcent.

Geranium foliis pinnatis inodorum.

The root is long, thick, and furniſhed with many fibres.

The leaves that firſt riſe from it are large and pinnated; and they are beautifully diſpoſed, making a round tuft upon the ground: they are long, narrow, and of a pale, pleaſant green: each is compoſed of ſix or more pairs of pinnæ, or ſmaller leaves, ſet on a middle rib, with an odd one at the end.

The

The ſtalks riſe among theſe: they are numerous, thick, and of a pale green: they ſpread themſelves every way, and are very much branched.

The leaves on theſe reſemble thoſe from the root, but they are ſmaller, and their pinnæ, as thoſe of the others, are very deeply cut in at the edges, and ſharp-pointed.

The flowers ſtand on the tops of the ſtalks and branches on ſlender, long foorſtalks, each ſupporting three or more: they are moderately large, and of a beautiful red.

The beaks are large, and ſharp.

It is common on ditch-banks, and flowers all ſummer.

C. Bauhine calls it *Geranium cicutæ folio minus et ſupinum.* Others, very idly, *Geranium moſchatum inodorum*; becauſe it reſembles the *muſk craneſbill*, next to be deſcribed, in figure, but has not its ſmell. Our people call it *Unſavoury craneſbill.*

19. Muſk Craneſbill.

Geranium foliis pinnatis moſchatum.

The root is long, white, thick, and furniſhed with many fibres.

The leaves that firſt riſe from it are long, and beautifully pinnated: they lie ſpread upon the ground in a circular manner, and are of a pleaſant green: each is compoſed of many pairs of pinnæ placed on a middle rib, and an odd one at the end; and theſe are not ſo deeply cut in at the edges as in the preceding ſpecies; often only notched ſlightly.

The ſtalks are numerous, thick, round, and hairy; they riſe in the centre of the tuft of leaves, and ſpread every way; and they are very much branched.

The leaves on theſe reſemble thoſe from the root, and are cut, in the ſame manner, ſlightly at the edges, and of a pale green: the whole plant has a very ſweet ſcent, reſembling that of muſk.

The flowers are ſmall and red: they ſtand ſeveral together in a kind of little umbells.

The ſtalks are long and ſlender.

It is wild in our ſouthern counties, and has been thence for its ſcent brought into gardens. It flowers in June.

C. Bauhine calls it *Geranium cicutæ folio moſchatum.* Others, *Geranium moſchatum.*

20. Great pinnated-leaved Craneſbill.

Geranium foliis pinnatis maximum.

The root is long and thick, and is furniſhed with numerous fibres.

The firſt leaves are very long, and large: they lie ſpread upon the ground, and are of duſky green. Each is compoſed of a great many pairs of pinnæ, and theſe are broad, ſhort, and indented more ſlightly at the edges than in either of the former.

The ſtalks are numerous, round, thick, and fleſhy: they are two feet long, not much branched, and they have leaves on them like thoſe from the root.

The flowers are ſmall and white, never having the leaſt tinge of red: they ſtand at the tops of the ſtalks and branches on long footſtalks, two or three on each, rarely more.

The beak is large and ſharp.

It is common in our ſouthern counties; and has been found by Mr. Ray in the neigbourhood of London.

Tabernamontanus calls it *Geranium arvenſe album.* Others, *Geranium inodorum album.*

21. Pinnated Craneſbill with ſpotted flowers.

Geranium foliis pinnatis floribus maculatis.

The root is long, thick, and divided into many parts.

The leaves riſe in a round tuft, and are very beautiful: they are long and narrow, and each is compoſed of ſeveral pairs of pinnæ, with an odd one at the end: theſe are ſhort, broad, and ſlightly ſerrated; and the whole leaf has much the aſpect of burnet leaf, whence ſome have named the plant.

The ſtalks are round, whitiſh, and branched; and the leaves which grow on them are like thoſe from the root in all reſpects, only they are ſmaller.

The flowers are moderately large, and of a ſingular ſtructure: they are compoſed each of five petals, in the manner of the others; but theſe are broad and unequal: the two upper ones are ſhorter than the others, and each has a green ſpot.

The beak is ſmall and ſlender.

It is found in Yorkſhire; and has been obſerved nearer London, particularly about Hackney.

Dillenius calls it *Geranium pimpinellæ folio.* Some have called this ſpecies *Geranium Robertianum*; but that breeds confuſion, another ſpecies having been long univerſally known by that name.

All the ſpecies of *craneſbill* are reſtringent and vulnerary. They are good againſt inward bruiſes, and in hæmorrhages of all kinds.

A ſtrong decoction of the herb *Robert* ſtands recommended as excellent in nephritick complaints; and the *dove's-foot craneſbill* is, in the ſame manner, recommended againſt ruptures: they have not been ſo much uſed in the practice of phyſick as they appear to deſerve.

DIVISION II. FOREIGN SPECIES.

1. Craneſbill with divided and ſubdivided leaves.

Geranium tuberoſum floribus umbellatis.

The root is large, thick, tuberous, and irregularly formed.

The firſt leaves are numerous and very beautiful: they are large, broad, and deeply divided and ſubdivided: each is formed of two or three pairs of large ſegments, reſembling wings, and an odd one at the end; and theſe ſegments are again deeply divided in the ſame manner, but none of theſe diviſions go down to the middle

Dwarf Dove's foot

Cranes Bill

Dove's foot Cranes Bill

Hairy Herb-robert Cranes Bill

Bloody Cranes Bill

Shining Dove's foot Cranes Bill

Jowl foot Cranes Bill

Red flowered Jowl foot Cranes Bill

Knotty Cranes Bill with Oval Leaves

Black Jowl foot Cranes Bill

Cranes Bill with Indented leaves

Pinnated leaved Cranes Bill without Scent

Musk Cranes Bill

Cranes Bill with divided & subdivided leaves

Purple & Clouded foot

Alpine Cranes Bill

Single Cranes Bill

Broad leaved hairy Cranes Bill

Poisonous Jagged Cranes Bill

Purple African Geranium

Naked Stalked African Geranium

Shining Cranes Bill

rib; ſo that they are only the inciſions of an entire leaf.

The ſtalks are round, upright, firm, and jointed.

Their joints are diſtinguiſhed by a little hollow membrane; and from theſe riſe the leaves.

They reſemble in all reſpects thoſe from the root, except that they are ſmaller.

The flowers are large and beautiful; and they are diſpoſed in a kind of umbell: they ſtand eight or ten together at the top of the ſtalk, and at the extremities of the branches: each has its long, ſlender footſtalk, and theſe all grow from one point at the top of the main ſtalk, where there is a ſmall general cup.

The beaks are very long, large, and ſharp.

It is a native of the Eaſt Indies, and flowers in Auguſt.

The flowers toward evening have an extremely fragrant ſmell, but in the day-time it is not perceived.

Breynius calls it *Geranium noctu olens Æthiopicum radice tuberoſa foliis myrrhidis latioribus.* Others, *Geranium triſte.*

2. Silvery alpine Craneſbill.

Geranium argenteum alpinum.

The root is long, thick, brown and irregular.

The leaves are numerous, ſmall, and ſupported on long footſtalks: they are divided deeply into five or more ſegments, and each of theſe is notched on the two ſides near the top; ſo that the extremity has a trifid appearance.

The ſtalks are ſlender and weak: they riſe in conſiderable number among the leaves, and are of a pale whitiſh colour: they divide toward the top into two parts, and ſupports on each of the diviſions a ſingle flower.

The whole ſtalk is rarely above four inches in height; ſo that the flowers do not riſe above the leaves.

They are large, and of a beautiful ſtrong red, ſtriated with purple.

The beaks are ſhort and thick.

It is not uncommon on the Alps, and flowers in July.

C. Bauhine calls it *Geranium argenteum Alpinum.* Others, *Geranium Alpinum longius radicatum*; and *Geranium argenteum montis baldi.*

3. Candy Craneſbill.

Geranium creticum acu longiſſima.

The root is long, ſlender, and white.

The firſt leaves are large, and are ſupported on long footſtalks: they are each compoſed of two or three pairs of pinnæ, or ſmaller leaves, with an odd one at the end: this is much larger than the others, and they are all notched at the edges: their colour is a faint green.

The ſtalk is round, thick, jointed, branched, of a pale green colour, and a foot and half high.

The leaves that ſtand on it perfectly reſemble thoſe at the root, but they are ſmaller.

The flowers ſtand at the tops of the ſtalks and branches in tufts three, four, or five together; and they are large, and of a bright red.

The beaks are extremely large, and long, ſharp-pointed, and of a greeniſh yellow.

It is frequent in the Greek iſlands, and flowers in June.

C. Bauhine calls it *Geranium acu longiſſima.*

4. Broad-leaved hairy Craneſbill.

Geranium latifolium hirſutum.

The root is long, ſlender, divided, and white.

The firſt leaves riſe in a thick tuft, and are unlike thoſe of moſt of this genus: they are large and broad, approaching to an oval figure, ſlightly ſerrated, and notched irregularly about the edges: they are of a pale green covered with a ſlight ſilvery down, and ſtand on long, ſlender, hairy footſtalks.

The ſtalk riſes in the centre, and is round, thick, upright, of a pale green, hairy, and a foot and half high.

The leaves on it perfectly reſemble thoſe from the root: they are ſmall, and ſoft to the touch.

The flowers grow in tufts ſix or eight together at the top of the ſtalk, and at the extremities of the branches: they are ſmall, and of a pale red.

The beaks are ſmall, and very ſlender.

It is a native of Italy, and flowers in July.

C. Bauhine calls it *Geranium folio althææ.* Others, *Geranium malacoides*, and *Geranium malvaceum.*

Linnæus ſuppoſes our *little ſea craneſbill*, before deſcribed, to be the ſame ſpecies with this; but it differs in the form and diſpoſition of the flowers, and in the ſtructure of the beaks.

This author has alſo a much more extraordinary conjecture on the preſent head; he imagines that this plant, the *candy craneſbill*, and the *muſk craneſbill*, and *common pinnated craneſbill without ſcent* are all the ſame ſpecies originally.

This is bringing in confuſion, and without any foundation in nature or reaſon. If theſe five plants be not diſtinct ſpecies the ſtudent will never know what to call by that name: he needs only be referred to the ſeveral figures here, or to the plants as they grow, to ſee that they differ as palpably, and as eſſentially, as the ſpecies of any other genus. If theſe were all originally one, nature has given us no means of knowing which are truly diſtinct: but theſe are innovations that will ſoon be ſlighted.

5. Stinking Craneſbill.

Geranium fœtidum.

The root is tuberous and oblong; of a reddiſh colour, and very ſtinking ſmell.

The leaves are ſmall, but beautifully divided, or, more properly ſpeaking, compoſed of many others: each general leaf is ſupported on a ſhort ſlender footſtalk, and is formed of four or five pairs of pinnæ ſet on a middle rib, with an odd one at the end; and each of theſe pinnæ is again compoſed of five or ſix pairs of minute, oval leaves ſet on a middle rib, with an odd one at its end.

The ſtalks are numerous, ſlender, and weak: ſometimes they are altogether naked, but ſometimes they have a couple of little leaves toward their lower part.

rib; ſo that they are only the inciſions of an entire leaf.

The ſtalks are round, upright, firm, and jointed.

Their joints are diſtinguiſhed by a little hollow membrane; and from theſe riſe the leaves.

They reſemble in all reſpects thoſe from the root, except that they are ſmaller.

The flowers are large and beautiful; and they are diſpoſed in a kind of umbell: they ſtand eight or ten together at the top of the ſtalk, and at the extremities of the branches: each has its long, ſlender footſtalk, and theſe all grow from one point at the top of the main ſtalk, where there is a ſmall general cup.

The beaks are very long, large, and ſharp.

It is a native of the Eaſt Indies, and flowers in Auguſt.

The flowers toward evening have an extremely fragrant ſmell, but in the day-time it is not perceived.

Breynius calls it *Geranium noctu olens Æthiopicum radice tuberoſa foliis myrrhidis latioribus.* Others, *Geranium triſte.*

2. Silvery alpine Craneſbill.

Geranium argenteum alpinum.

The root is long, thick, brown and irregular.

The leaves are numerous, ſmall, and ſupported on long footſtalks: they are divided deeply into five or more ſegments, and each of theſe is notched on the two ſides near the top; ſo that the extremity has a trifid appearance.

The ſtalks are ſlender and weak: they riſe in conſiderable number among the leaves, and are of a pale whitiſh colour: they divide toward the top into two parts, and ſupports on each of the diviſions a ſingle flower.

The whole ſtalk is rarely above four inches in height; ſo that the flowers do not riſe above the leaves.

They are large, and of a beautiful ſtrong red, ſtriated with purple.

The beaks are ſhort and thick.

It is not uncommon on the Alps, and flowers in July.

C. Bauhine calls it *Geranium argenteum Alpinum.* Others, *Geranium Alpinum longius radicatum*; and *Geranium argenteum montis baldi.*

3. Candy Craneſbill.

Geranium creticum acu longiſſima.

The root is long, ſlender, and white.

The firſt leaves are large, and are ſupported on long footſtalks: they are each compoſed of two or three pairs of pinnæ, or ſmaller leaves, with an odd one at the end: this is much larger than the others, and they are all notched at the edges: their colour is a faint green.

The ſtalk is round, thick, jointed, branched, of a pale green colour, and a foot and half high.

The leaves that ſtand on it perfectly reſemble thoſe at the root, but they are ſmaller.

The flowers ſtand at the tops of the ſtalks and branches in tufts three, four, or five together; and they are large, and of a bright red.

The beaks are extremely large, and long, ſharp-pointed, and of a greeniſh yellow.

It is frequent in the Greek iſlands, and flowers in June.

C. Bauhine calls it *Geranium acu longiſſima.*

4. Broad-leaved hairy Craneſbill.

Geranium latifolium hirſutum.

The root is long, ſlender, divided, and white.

The firſt leaves riſe in a thick tuft, and are unlike thoſe of moſt of this genus: they are large and broad, approaching to an oval figure, ſlightly ſerrated, and notched irregularly about the edges: they are of a pale green covered with a ſlight ſilvery down, and ſtand on long, ſlender, hairy footſtalks.

The ſtalk riſes in the centre, and is round, thick, upright, of a pale green, hairy, and a foot and half high.

The leaves on it perfectly reſemble thoſe from the root: they are ſmall, and ſoft to the touch.

The flowers grow in tufts ſix or eight together at the top of the ſtalk, and at the extremities of the branches: they are ſmall, and of a pale red.

The beaks are ſmall, and very ſlender.

It is a native of Italy, and flowers in July.

C. Bauhine calls it *Geranium folio althææ.* Others, *Geranium malacoides*, and *Geranium malvaceum.*

Linnæus ſuppoſes our *little ſea craneſbill*, before deſcribed, to be the ſame ſpecies with this; but it differs in the form and diſpoſition of the flowers, and in the ſtructure of the beaks.

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The ſtalks are numerous, ſlender, and weak: ſometimes they are altogether naked, but ſometimes they have a couple of little leaves toward their lower part.

The flowers are moderately large, and of a bright red: they ſtand on ſlender footſtalks, one, two, or more together.

The beaks are large.

The whole plant in its wild ſtate has a diſagreeable ſmell, though not ſo ſtrong as the root.

It is a native of the mountainous parts of Europe, and flowers in June.

The generality of authors call it *Geranium fœtidum*.

6. Tuberous-rooted Cranesbill.

Geranium foliis multifidis radice tuberoſa.

The root is large and knobby; of a duſky colour, and inſipid to the taſte.

The leaves are numerous, and beautifully divided: they ſtand on long, ſlender, hairy footſtalks; and they are themſelves a little hairy, and of a pale green: their figure approaches to round, but they are cut into nine or more ſegments down to the middle rib; and theſe are again deeply notched, and divided.

The ſtalk is round, upright, but weak, and a foot high: it is not much branched.

The leaves on it reſemble thoſe from the root, but that they are ſmaller.

The flowers are large, and of a bright red: they ſtand on ſlender pedicles riſing from the boſoms of the leaves, two on each.

The beaks are long, and moderately thick.

It is a native of Spain, and flowers in Auguſt.

C. Bauhine calls it *Geranium tuberoſum majus*. Others, *Geranium tuberoſum vel bulboſum*; and the gardeners, *Bulbous cranesbill*.

7. Purple African Geranium.

Geranium Africanum flore purpureo.

The root is long, thick, and tuberous.

The firſt leaves are large, numerous, and ſupported on long, hairy footſtalks: they are very broad, ſinuated at the edges, and of a pale green, ſlightly hairy, and ſoft to the touch.

The ſtalk is round, firm, erect, and irregularly branched.

The leaves on it are of the ſame form with thoſe from the root; and they grow principally near its bottom: it is of a pale colour, and ſo are the leaves.

The flowers ſtand at the tops of the branches in large tufts; and they are very beautiful: they are large, and of an elegant red tending to purple, and have yellowiſh edges.

The beaks are large.

Before ſun-riſe, and after it is ſet, the whole plant has a very fragrant ſmell; but it is not much perceived in the middle of the day.

It is a native of Africa, and flowers in July.

Commelin calls it *Geranium Africanum noctu oleus tuberoſum vitis foliis hirſutus*.

There are many varieties of this preſerved in our gardens.

8. Naked-ſtalked African Geranium.

Geranium Africanum caule nudo.

The root is compoſed of numerous fibres riſing from a ſmall head.

The leaves riſe in great numbers, and have long footſtalks; but theſe are ſo weak that the leaves are ſeldom ſupported tolerably erect: they are not unlike laurel leaves in ſhape, long, broad, and not at all dented at the edges: they uſually have a couple of ſmall leaves placed on the footſtalk, in the manner of ears, a little below their baſe.

The ſtalks are numerous, round, ſlender, and a foot high: they are uſually naked, but ſometimes have, toward the ground, a leaf or two, like thoſe which grow on the footſtalks of the others.

At the top of each ſtalk ſtands a large tuft of flowers, twenty or more: each flower has its ſeparate footſtalk; and they all riſe from one point at the top of the ſtalk, where there is ſpread under them a kind of general cup, formed of five little, oblong leaves.

The flowers themſelves are large, and of a beautiful red, tending to purple; and the beaks are ſmall.

It is a native of Africa, and flowers in July.

Commelin calls it *Geranium Africanum foliis plerumque auritis flore rubro purpuraſcente*.

We know little of the virtues of theſe plants; but they ſeem in general of the ſame nature with thoſe of our own growth.

The END of the TENTH CLASS.

THE

THE

BRITISH HERBAL.

CLASS XI.

Plants whoſe flower is compoſed of FIVE PETALS *irregularly diſpoſed; which have a* SINGLE CAPSULE *ſucceeding each flower, and have the leaves placed irregularly on the ſtalks.*

THE plants with five petals in the flower, and a ſingle capſule, are very numerous; and, therefore, the obſerving ſuch ſubordinate characters as nature has placed between them is the more neceſſary: had there been fewer of them, the whole might have been diſpoſed in one claſs; and theſe general diſtinctions, from the ſtructure of the flower, and diſpoſition of the leaves on the ſtalks, would only have ſubdivided them: but nothing perplexes the ſtudent ſo much as too great a multiplicity of objects under the ſame head. It is for this reaſon I have again ſeparated many of thoſe genera which Linnæus had joined together; and, for the ſame cauſe, this aſſortment of plants is diſpoſed under three claſſes: nature has furniſhed ſufficient grounds for the diſtinction, and they are ſufficiently obvious; the ſcience therefore will be rendered more familiar, by following this method in her ſteps.

Linnæus, in this, as in other caſes often before mentioned, ſeparates the plants belonging to one into ſeveral of his moſt remote claſſes: I ſhall be content to name this where needful in the accounts of the ſeveral genera, not to fill too many pages with a criticiſm, which, however needful to the ſervice of the ſcience, I never make without concern.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this kingdom.

GENUS I.

VIOLET.

VIOLA.

THE flower is compoſed of five petals of unequal ſize; one is placed ſingly, and the other four in two pairs: the ſingle petal is broad, ſhort, obtuſe, and nipp'd at the top; and it runs out into a ſpur behind. The two ſide-petals are oblong and obtuſe, and the two others larger and broader: this is the ſtructure of the flower. The ſeed-veſſel is of an oval form, with three ſlight ridges: it is compoſed of three valves, and contains only one cell: the cup is ſmall, compoſed of five leaves irregularly diſpoſed, and remains when the flower is fallen.

Linnæus places this among the *ſyngeneſia*, *polygamia monogamia*; an idle, intricate, and unnatural claſs; ſeparating it from the other genera to which it is properly allied.

DIVI-

DIVISION I. BRITISH SPECIES.

1. Common Violet.

Viola purpurea vulgaris.

The root is long, ſlender, crooked, and furniſhed with numerous fibres.

The leaves are large, and they riſe many together from the head of the root, and with them riſe ſeveral ſlender ſtalks, that, lying upon the ground, take root, and ſpread the plant abundantly.

The leaves are broad, ſhort, and roundiſh, but heart-faſhioned at the baſe: they are of a deep green, ſlightly crenated at the edges, and ſupported on long, ſlender footſtalks.

Among theſe riſe numerous, ſlender, weak, and naked ſtalks; on each of which ſtands a ſingle flower.

This is large, of a deep, beautiful blue, and of an extremely ſweet ſmell.

The ſeed veſſel is large, and the ſeeds are numerous and oval.

It is common under hedges, and flowers early in ſpring.

C. Bauhine calls it *Viola martia purpurea flore ſimplici odoro.* Others, *Viola nigra vel purpurea*, and *Viola martia ſimplex.*

This is the ſpecies whoſe flowers ſhould be uſed, and no other: they are cooling, emollient, and gently cathartick; as they loſe a great part of their virtue in drying, and are not to be had freſh, except in ſpring, the beſt method of uſing them is in the form of a ſyrup.

This, when carefully made, is very pleaſant, and has all the virtues of the flowers. It is excellent, mixed with oil, to keep children open; and, in the ſame form, it may be given with great ſucceſs againſt habitual coſtiveneſs in grown perſons; taking a ſmall doſe every night.

It is alſo good in coughs and hoarſeneſſes.

The ſeeds, dried and powdered, work gently by ſtool and urine. They are excellent in the gravel, and in nephritick complaints in general.

The leaves are emollient, and uſed in decoctions for glyſters. Too large a doſe of the ſeeds will occaſion vomiting.

Many authors have deſcribed what they call the *white flowered violet* as a diſtinct ſpecies from the common; but this is an error. We ſee many plants whoſe flowers, though naturally coloured, will become white when they are ſtarved; and this is the caſe in the *white violet*: its ſeeds will raiſe *blue violets*, in a garden.

2. Dogs Violet.

Viola foliis oblongis cauleſcens.

The root is very long, ſlender, divided, and furniſhed with long, crooked fibres.

The firſt leaves are numerous, and of a duſky green: they are ſupported on long, ſlender footſtalks, and are ſmaller than thoſe of the *common violet*, and narrower in proportion to the length: they are heart-faſhioned at the baſe, and notched round the edges.

Amongſt theſe riſe ſeveral ſmall ſtalks, which take root where they touch the ground, but grow up from it to two or three inches in height, and have many leaves on them, like thoſe from the root, but ſmaller.

The flowers ſtand ſingly on long, ſlender footſtalks that riſe from the root, or from thoſe parts of the ſtalk juſt named, which have taken root: they have uſually ſome little films upon them, but no leaves, properly ſo called.

The flower reſembles that of the *common violet*, but it is ſmaller, of a paler blue, and has no ſmell.

It is common under hedges, and flowers in April.

C. Bauhine calls it *Viola inodora ſylveſtris.* Others, *Viola ſylveſtris*, and *Viola canina.*

This is ſometimes found with a white flower, as the other; and ſome have deſcribed it in that ſtate as a diſtinct ſpecies.

3. Dwarf Violet with a yellow ſpur.

Viola pumila calcari luteo.

The root is ſmall, oblong, and divided; and has numerous, ſlender fibres.

The leaves that riſe firſt from it have ſhort footſtalks: they are ſmall, rounded, and of a duſky green; very ſlightly ſnip'd at the edges, and ſcarce at all cordated at the baſe: this form they conſtantly keep, and the ſpecies is therefore plainly diſtinct.

The ſtalk is ſlender, upright, and of a pale green; and at the top ſuſtains a ſingle flower: this is large in proportion to the plant, and is of a beautiful deep blue, with a yellow ſpur behind.

The ſeed-veſſel is oval, and the ſeeds are numerous and alſo oval.

It is not uncommon in Surry and Suſſex. It flowers in April.

Ray calls it *Viola canina minor floris calcari luteo.*

4. Round ſmooth-leaved Violet.

Viola foliis rotundioribus glabris.

The root is long, ſlender, and furniſhed with numerous fibres.

The leaves riſe in a conſiderable tuft, and they are ſhorter than in the preceding ſpecies, and obtuſe at the ends; ſo that they appear roundiſh: they are of a deep green colour, and perfectly ſmooth.

The flowers ſtand on ſingle footſtalks, which are weak, ſlender, and five or ſix inches high: they are of a pale blue, of the ſhape of the *common violet*, but very ſmall, and wholly ſcentleſs.

The ſeed-veſſel is ſmall and oval; and the ſeeds are ſmall.

It was obſerved firſt in Oxfordſhire, but it grows all over the north of England on boggy grounds. It flowers in June.

Dr. Plot, who firſt deſcribed the ſpecies, calls it *Viola paluſtris rotundifolia glabra.*

5. Short-leaved Violet with ſtriated flowers.

Viola foliis brevibus ſcribus ſtriatis.

The root is a cluſter of innumerable, ſlender fibres.

The leaves grow in a great tuft: they have ſhort and weak footſtalks, and many of them lie upon the ground: they are roundiſh, but heart-faſhioned at the baſe, and ſomewhat pointed at the end; of a pale green, hairy, and ſoft to the touch.

The flowers ſtand on very ſhort footſtalks, and are ſmaller by much than in the *common violet*: they are of a faint red, beautifully ſtreaked with a deep purple.

The ſeed-veſſel is oblong, and the ſeeds are very numerous.

It is frequent in the northern parts of England under damp hedges. It flowers in May.

Ray calls it *Viola rubra ſtriata eboraſcenſis*: a name given by Parkinſon, who firſt received it from Yorkſhire.

6. Great hairy Violet with ſtriated flowers.

Viola major hirſuta floribus ſtriatis.

The root is long, thick, hard, and woody.

The leaves riſe from its head, four or five together, and are very hairy, of a pale green, oblong, heart-faſhioned, and notched at the edges; and they have very long, whitiſh, hairy footſtalks.

Theſe and the flower-ſtalks are all that riſe from the root; for it does not ſend out any hanging ſhoots that take root, as the *common violet*; nor any of thoſe leafy ſtalks that are in the *common dog violet*.

The footſtalks which ſupport the flowers are ſhort and thick.

The flowers are large, but of a faint pale blue, ſtreaked with white.

The ſeed-veſſel is large and ſhort; and the ſeeds are very numerous.

It is frequent under hedges, and flowers in June.

Ray calls it *Viola trachelii folio*. Moriſon, *Viola martia major hirſuta inodora*. Merret, *Viola foliis trachelii ſerotina*.

7. Panſy, or Hearts-eaſe.

Viola tricolor major.

The root is long, ſlender, divided, and full of fibres.

The ſtalks are numerous, weak, and of a faint green: they ſpread every way upon the ground, and in part raiſe themſelves up for flowering: they are ſix or eight inches long, and branched.

Thoſe leaves are ſhort, roundiſh, and lightly indented, which grows on the lower part of the ſtalks; but many of the others are longer, and more deeply cut; and ſome toward the top divided to the rib by numerous ſegments.

They are of a deep green, and ſmooth ſurface.

The flowers are very beautiful; they are variegated with purple and yellow; and there is uſually more or leſs white, or blue, among them. Theſe two colours are the more ſtriking in this flower, but from one of thoſe, which comes in, though in a leſs obvious manner, as a third, the plant obtained its Latin name of *Viola tricolor*, and its Engliſh one of *three faces under a hood*.

The ſeed-veſſel is ſhort and ſmall; and the ſeeds are numerous.

It is found wild among corn in the north of England, and has thence been brought into our gardens.

In its wild ſtate it is lower in the ſtalk, and the flowers are ſmall and leſs ſpecious

Frequently there are only two colours in them, but thoſe are bright and ſtriking. We have another wild ſpecies, to be deſcribed hereafter, with two faint colours, is diſtinct, and muſt not be confounded with this.

Ray calls this *Viola tricolor*. Others, *Viola tricolor major et vulgaris*. J. Bauhine, *Flos trinitatis*.

8. Small-flowered Panſy.

Viola bicolor foliis minoribus.

The root is a tuft of ſlender fibres.

The firſt leaves are roundiſh, and ſharply ſerrated at the edges.

The ſtalks are ſlender, upright, and weak; and they are very little branched: they are of a pale yellow colour, and ſix or eight inches high.

The leaves that grow on theſe are oblong, narrow, and very deeply divided: they are of a pale green, thin, and tender.

The flowers are numerous and ſmall, and they have very little beauty, and are generally variegated only with white and a dead yellow.

The ſeed-veſſels are ſmall and roundiſh; and the ſeeds are very minute.

It is common in corn-fields throughout the kingdom; and flowers in June.

C. Bauhine calls it *Viola bicolor arvenſis*. Others, *Viola tricolor ſylveſtris*. J. Bauhine, *Jacea bicolor frugum et hortorum vitium*.

9. Great-flowered yellow Panſy.

Viola lutea grandiflora.

The root is long, ſlender, and furniſhed with a great number of fibres.

The firſt leaves are oblong, broad, and not at all divided at the edges; but they ſometimes, though not univerſally, have a couple of little appendages, like ears, at the baſe.

The ſtalks are ſlender, weak, and four or five inches high.

The leaves on them are partly divided deeply, and partly whole, in the manner of thoſe from the root; and they are of a deep green, and gloſſy.

The flowers are very large, of the ſhape of the *garden panſy* flower, more than equal to it in ſize; and of a fine gold yellow colour, without the leaſt mixture of any other.

They ſtand upon very long, ſlender footſtalks riſing from the boſoms of the leaves; and, when fully open, make a very ſplendid and elegant appearance.

The ſeed-veſſel is ſmall, and the ſeeds are numerous.

It is found in many parts of the north of England, and flowers in July.

Ray calls it *Viola montana lutea grandiflora noſtras*. Others, *Viola flammea*.

These are all the species of wild *violet*. Others have been named by less accurate writers, but on a better examination they have been found only varieties of one or other of the former species.

These all are supposed to possess the same virtues with the common kind, but in a less degree; and therefore they are not to be regarded.

The flowers of the *pansy* have, with some, the credit of being a cordial and sudorifick; and there are those who recommend them in epilepsies; but this does not stand upon any warrant of experience.

DIVISION II. FOREIGN SPECIES.

1. Fingered-leaved Violet.

Viola foliis digitatis.

This is of the *common violet*, not of the *pansy* kind, though extremely singular in the leaf.

The root is composed of numerous fibres, rising from a small head.

The leaves are supported on long, slender, reddish footstalks, and are broad, and divided in the fingered or palmated manner, each into about five parts: these segments stand wide asunder: they are slightly notched at the edges, and the two outer pieces are broader than the others.

The whole leaf is small, and its colour is a pale green.

The stalks which support the flowers rise among the leaves; they are weak, slender, and about three inches high.

One flower stands on each, and this is small and white.

The seed vessel is short, and full of small seeds.

There is little beauty in the plant; but it is extremely singular.

It is a native of North America, and flowers in April.

Plukenet calls it *Viola Virginiana platanifolia foliis parvis.*

There sometimes are running shoots from the root, as in the *common violet.*

2. Seven-leaved Violet.

Viola foliis septempartitis.

The root is long, slender, crooked, and furnished with many fibres.

The leaves rise in a large tuft, and each is supported on a long, slender footstalk: they are large, and divided into seven parts down to the stalk: these segments are narrow, and stand so perfectly separate that the name of *seven-leaved* seems hardly exceptionable, though, in reality, those which appear to be separate leaves are no other than the seven segments of one entire leaf.

The stalks which support the flowers rise in numbers from the root, in the manner of the *common violet.* They are short, slender, and each supports a single flower.

This is large and beautiful; sometimes of one colour, which is a rich, deep blue, but oftener variegated; so that it seems a *pansy* growing in the manner of the *common violet.*

It is a native of Virginia, and flowers in April.

Plukenet calls it *Viola Virginiana tricolor foliis multifidis caulículo aphyllo.*

3. Great upright Violet.

Viola erecta maxima foliis cordatis.

The root is composed of numerous fibres, which are long, tough, crooked, and divided.

The first leaves are small and oval: they soon fade and perish.

The stalks are numerous, round, firm, upright, not much branched, and of a pale green colour: they are a foot or more in height, and very robust.

The leaves on these are large, longish, and somewhat heart-fashioned: they have long footstalks, and they are slightly notched at the edges; and at their base on the stalk grow smaller and more jagged ones.

The flowers stand on long footstalks rising from the bosoms of the leaves, one on each: they are large, and usually of a pale blue; sometimes deeper; sometimes white; and sometimes variegated.

The seed-vessel is large, and the seeds are numerous.

It is a native of the mountainous parts of Europe; and flowers in June.

C. Bauhine calls it *Viola martia arborescens purpurea.* Morison, *Viola erecta flore caeruleo et albo.*

4. Kidney-leaved Violet.

Viola erecta foliis reniformibus.

The root is composed of many tough, and spreading fibres.

The leaves are numerous, and very beautiful: each has its separate long and slender footstalk; and their shape is, like that of a kidney, hollowed at the base, and notched round the edges.

The stalk rises in the centre, and is round, upright, and not at all branched.

It has three or four leaves resembling those from the root, but smaller; and at the top it divides into two parts.

On each of these stands a flower: this is a perfect *violet*: and its colour is throughout a fine deep yellow.

The seed-vessel is small, and the seeds are numerous and little.

It is an extremely singular plant.

Till it flowers it would, by most persons, be taken for the *thora*, described before in its proper class.

It is a native of the northern parts of Europe, but not of England; and is most frequent on cold, barren mountains.

It flowers in June.

C. Bauhine calls it *Viola alpina rotundifolia lutea.* Others, *Viola rotundifolia montana major.*

5. Oval

5. Oval ſerrated-leaved Panſy.

Viola foliis ovatis ſerratis erecta.

The root is long, ſlender, and full of fibres.

The ſtalks are numerous, round, ſlender, upright, and very much branched.

The leaves are broad, ſhort, and of a figure approaching to oval: they are ſharp-pointed, and ſharply ſerrated; and they adhere by a broad baſe without any footſtalk.

The flowers are large, and of a deep purple, variegated with white and yellow: they have ſhort and ſlender footſtalks, and are very beautiful.

The ſeed-veſſel is ſmall, and the ſeeds are numerous.

It is a native of Africa, and flowers in Auguſt.

Plukenet calls it *Viola ſerrata latiore folio ſpecies peregrina.*

Theſe foreign *violets* poſſeſs the ſame virtue with ours, but none of them is equal to the common kind.

GENUS II.

IMPATIENT.

IMPATIENS.

THE flower is compoſed of five petals of unequal ſize, and irregularly diſpoſed: theſe are one upper, two lower, and two intermediate: the upper petal is ſhort, upright, and lightly ſnipp'd into three parts at the top: the lower pair are large, broad, unequal, and reflex; and they make a kind of lower lip, as the ſingle petal above does an upper one: the intermediate pair are placed oppoſite to one another, and there is a ſpur behind.

This is the ſtructure of this ſingular flower.

The ſeed-veſſel is of an oblong figure, and pointed: when the ſeeds are ripe it burſts with violence on the leaſt motion even of the wind.

The cup is compoſed of two very ſmall leaves: they are placed ſide-ways of the flower, and fall with it; and they are not green, as in moſt plants, but coloured.

Linnæus places this among the *ſyngeneſia polygamia monogamia*, one of his artificial claſſes; and he joins with it the *balſamina*. This is very wrong, becauſe the ſhape of the ſeed-veſſel is altogether diſtinct; and there are other obvious and eſſential differences.

Ray has, by ſome overſight, alſo miſplaced this plant: he has put it among the *tetrapetala*, or thoſe with four-leaved flowers and ſingle capſules, whereas the petals are very diſtinctly five.

Of this genus, thus ſtrictly characteriſed, there is but one known ſpecies, and that is a native of Britain.

Yellow Impatient.

Impatiens flore flavo.

The root is compoſed of numerous large fibres.

The ſtalk is round, thick, upright, branched, and two feet high: it is of a pale green colour, of a firm, yet tender, ſubſtance, and looks in a manner clear, or tranſparent.

The leaves are oblong, broad, and ſharply ſerrated: they ſtand irregularly on the ſtalks: they have ſhort pedicles; and the parts of the ſtalks where they grow, frequently ſwell into a kind of thick knots.

The flowers are large, numerous, and of a deep yellow: they have an open mouth, and a crooked ſpur.

The ſeed-veſſels are oblong and brown; and they contain many ſeeds: they will burſt open on but approaching to touch them; the motion in the air, cauſed by the hand, being ſufficient.

It is found in our northern counties in damp places; and flowers in Auguſt.

C. Bauhine calls it *Balſamina lutea ſive noli me tangere.* Others, *Mercurialis ſylveſtris*, and *Noli me tangere.* We have it as a curioſity in many gardens; where the gardeners call it *Quick in hand*, or *Touch me not.*

The leaves, bruiſed and applied to the ſkin, will raiſe an inflammation.

Inwardly taken, it is a powerful but dangerous diuretick; occaſioning bloody urine, and terrible ſtranguries, when given in an over-doſe.

GENUS III.

DYERS-WEED.

LUTEOLA.

THE flower conſiſts of five petals, unequal in bigneſs, and irregularly diſpoſed: the upper one ſtands ſingle, and is ſmall, and lightly divided into ſix parts at the tip: the two ſide-ones are placed oppoſite to one another, and are divided each into three at the extremities; and the two lower are minute and undivided: they are ſo ſmall that they are often overlooked; and the flower ſeems to conſiſt only of three petals.

The ſeed-veſſel is uneven and angulated, with an opening at the top, ſurrounded with three little points, which are the remains of the ſtyles: the cup is ſmall, and formed of a ſingle piece, divided into five parts, two of which ſtand wider aſunder than the reſt.

Linnæus places this among his *polyandria trigynia*; the filaments being numerous, and growing to the receptacle; and the ſtyles being three.

This author joins the *reſeda* in one genus with this, and thence has created himſelf a great deal of trouble and confuſion.

He complains of the difficulty of eſtabliſhing a character for this genus: but if he had avoided that confuſion of joining a diſtinct one to it, and had paid more regard to larger parts, and leſs to the more minute, the taſk would have been eaſy, and the ſtudents path, which is perplexed in the higheſt degree in this method, would have been rendered plain and eaſy, as we ſhall ſhew it in ours.

DIVISION I. BRITISH SPECIES.

1. Common Diers-weed.

Lutcola vulgaris.

The root is long, white, divided into ſeveral parts, and hung round with many threads.

The firſt leaves riſe in a large and beautiful tuft: the outer ones are long and narrow; and the others ſhorter all the way to the centre: they have no footſtalks: they are not at all indented at the edges; and they are of a bright green.

The ſtalks are ſtrait, upright, ſlender, not at all branched, and three feet high.

The leaves on them are placed irregularly, and are of the ſame form with thoſe from the root; but of a yellowiſh green.

The flowers are ſmall and yellow: they ſtand in a long ſpike at the top of the ſtalk.

The ſeed-veſſels are large, and the ſeeds extremely numerous, and ſmall.

It is common on ditch-banks, and in other waſte ground; and flowers in July. It is alſo cultivated in fields in ſome places for the uſe of the diers.

C. Bauhine calls it *Lutcola herba ſolicis folio*. Others, *Luteola*, and *Herba lutea*.

In Engliſh, beſides its name *Diers-weed*, it is called *Wold* and *Would*; theſe names ſound like *woad*, and the two plants, though in themſelves perfectly diſtinct, have from this been confounded one with another by the huſbandmen. Even many of thoſe who have written treatiſes for their inſtruction, have thought them the ſame plant.

The diers uſe the whole herb, and find it anſwer more purpoſes than one: they boil it with alum, and in this condition it dyes yellow alone, or with a mixture of blue it makes a green.

White cloths are put in to be dyed yellow, and the colour given by this herb is a very rich and good one: for greens they generally dye the cloth blue firſt, and then dip it into this liquor, which, mixing with the blue tinge, makes a ſtrong green.

2. Short-leaved Diers-weed.

Lutcola parva foliis brevibus.

The root is long, ſlender, and furniſhed with many fibres.

The firſt leaves are numerous, and ſpread themſelves on the ground in ſeveral circular ſeries; the ſmalleſt in the middle: they are oblong, and ſomewhat broad; not ſo long and narrow in proportion to their ſize as the others.

The ſtalk is ſingle, not at all branched, and about eight inches high.

The leaves are placed irregularly on it; and they are oblong, and ſomewhat broad.

The flowers are very numerous, ſmall, and of a pale yellow: they ſtand in a long ſpike at the top of the ſtalk.

The ſeed-veſſel is ſlender and crooked, and edged with three ribs.

It is found on walls, and on barren grounds among corn. It flowers in July.

Ray calls it *Luteola minima polygalæ folio*.

DIVISION II. FOREIGN SPECIES.

Sharp leaved Diers-weed.

Reſeda foliis anguſtis acuminatis.

The root is long, ſlender, white, and full of fibres.

The leaves that riſe firſt are very narrow, long, and ſharp-pointed: they do not ſpread themſelves upon the ground, but riſe up in a thick tuft.

The ſtalk is round, firm, upright, ten inches high, and yellow.

It does not divide into branches, but ſends out a number of ſhoots all the way up from the boſoms of the leaves; ſo that it appears of a pyramidal form.

The leaves are placed alternately and at conſiderable diſtances: they are very long, narrow, and ſharp at the point, and are of a pale green.

The flowers ſtand in long ſpikes at the top of the ſtalk, and of theſe branches; and they are very ſmall, and of a pale yellow.

The ſeed-veſſel is oblong and crooked; and the ſeeds are very numerous and ſmall.

It is a native of the mountainous parts of Europe, and flowers in Auguſt.

Tournefort calls it *Luteola pumila pyrenaica linariæ folio*.

The leaves are not of that yellowiſh hue that thoſe of our *common diers-weed* get when they begin to grow dry; but are at firſt of a bluiſh green, and afterwards greyiſh.

GENUS



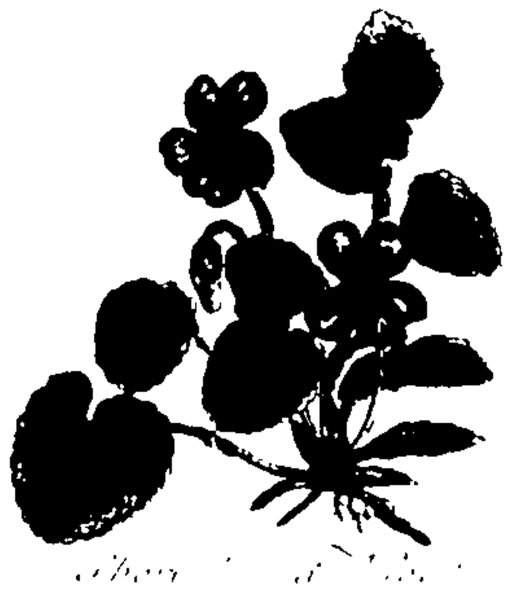
Common Violet



Dog's Violet



Pansy Violet with a Yellow Spur



Yellow Marsh Violet



Hairy Violet



Small Flowered Cranes



Great Flowered Yellow Cranes



Original hairy Violet



Hairy leaved Violet



Great Upright Violet

Kidney leaved Violet



Tricolor

Oval Serrated Leaved Cranes



Common Dwarf Wall



Sharp leaved Sparrow Wort



Common Base Rocket



Great Base Rocket



Base Rocket with Thyrsum



Spanish Catchfly

GENUS IV.

BASE ROCKET.

RESEDA.

THE flower is compoſed of five irregular petals, unequal in ſize, and unevenly diſpoſed; but they do not differ in bigneſs ſo much as thoſe of *luteola*; and they are all divided into three parts at the edge: the ſeed-veſſel is ſhort and angulated, and is open at the end: the cup is ſmall, divided into five parts, with an appendage to one of them: ſo that there appear to be ſix; and it remains when the flower is fallen.

Linnæus, as already obſerved, places this among the *polyandria trigynia*; joining it with *luteola*, from which it differs in the ſtructure of the flower, and other eſſential and obvious characters.

DIVISION I. BRITISH SPECIES.

Common Baſe Rocket.

Reſeda vulgaris.

The root is long, ſlender, white, and furniſhed with many fibres.

The firſt leaves riſe in a cluſter; and they are very beautiful in themſelves, and diſpoſed with great regularity: they are divided in the pinnated manner, and each is formed of three pinnæ, or deep ſegments, with an odd one at the end: theſe are of a pale green, long, and narrow.

The ſtalks are numerous, round, firm, upright, and two feet high.

The leaves on theſe reſemble thoſe from the root, but are narrower and ſmaller.

The flowers ſtand in long ſpikes at the tops of the ſtalks; and they are ſmall and whitiſh.

The ſeed-veſſel is large, angulated, and open; and the ſeeds are very numerous, and minute.

It is found in many parts of this kingdom on chalky and other barren ſoils. It flowers in July.

C. Bauhine calls it *Reſeda vulgaris*. Others, *Reſeda minor*.

The leaves ſometimes are curled, and criſp at the edges: this happens generally from want of nouriſhment.

Boccone has diſtinguiſhed the *reſeda* in this ſtate as a ſeparate ſpecies, under the name of *reſeda criſpa Gallica*, and the editor of the laſt edition of the Synopſis has given it a place as if diſtinct; but it is only a variety.

Let the reader, in juſtice to the memory of that great man, Mr. Ray, obſerve whether the ſeveral errors of this kind, which occur in the laſt edition of the Synopſis, were his or thoſe of this editor, Dillenius. Such as are marked with an aſteriſm are Dillenius's, and this is one of them. They are meant as improvements.

DIVISION II. FOREIGN SPECIES.

1. Great Baſe Rocket.

Reſeda major.

The root is long, thick, and furniſhed with many fibres.

The leaves that riſe firſt are very large, of a deep green, and beautifully pinnated: each conſiſts of about five pairs of pinnæ, and an odd one at the end; and theſe are all long, narrow, and ſharp-pointed.

The ſtalk riſes in the midſt, and is round, firm, upright, and a yard high: it is thick ſet with leaves, and ſends out a number of long branches.

The leaves on theſe reſemble thoſe from the root, and are of a faint green.

The flowers ſtand in long, thick ſpikes at the tops of the branches; and they are large and yellow.

The ſeed-veſſel is thick, crooked, and hangs downward.

The ſeeds are ſmall, very numerous, and brown.

It is frequent in the ſouth of France, and flowers in Auguſt.

C. Bauhine calls it *Reſeda maxima*. Others, *Reſeda major*.

2. Baſe Rocket, called Phyteuma.

Reſeda calycibus maximis.

The root is long, thick, white, and furniſhed with many fibres.

The firſt leaves are long and narrow: they lie ſpread upon the ground, in the manner of thoſe of the common diers-weed; and the plant in this ſtate has vaſtly its appearance.

The ſtalks riſe in the centre of this tuft, and are round, ſlender, and rarely at all branched.

The leaves ſtand irregularly on them, and are very oddly varied in figure: ſome of them perfectly reſemble thoſe from the root; but others are divided at their ends into three or five parts, in the manner of fingers.

The flowers are ſmall, but they ſtand in very large cups.

They are diſpoſed in a looſe ſpike at the tops of the ſtalks, and in the boſoms of the upper leaves.

The ſeed-veſſel is large, and ſtands ſurrounded by this great cup: the ſeeds are very minute.

It is common in the ſouth of France, and flowers in July.

C. Bauhine calls it *Reſedæ affinis phyteuma*. Columna, *Eruca apula triſida et quinquefolia.*

3. Baſe Rocket, called little Spaniſh Catchfly.

Reſeda alba minima foliis integris.

The root is long, ſlender, white and divided.

The leaves that grow from it are numerous, oblong, narrow, and ſharp-pointed.

The ſtalks riſe in the centre of this cluſter; and they are ſlender, upright, five or ſix inches high, and ſcarce at all branched.

Their leaves are ſmall, and like thoſe from the root: they are placed irregularly, and are of a pale green.

The flowers are very ſmall, and white: they ſtand at the tops of the ſtalks in long, ſlender ſpikes.

The ſeed-veſſel is ſmall, and the ſeeds are very minute.

It is common on hilly, barren places in the warmer parts of Europe; and flowers in July.

C. Bauhine calls it *Reſeda alba minor.* Cluſius, *Seſamoides ſalamanticum parvum ſecundum* Our common Engliſh writers, *Little Spaniſh catchfly.*

Theſe ſeveral ſpecies are ſaid to be good in fomentations, and other compoſitions for external uſe; but their virtues are not ſupported upon experience.

SERIES II.

Plants with a five-leaved flower, and ſingle capſule for the ſeeds, of which there is no ſpecies native of Britain.

GENUS I.

CUCUBALUS.

THE flower is compoſed of five petals, which are divided at the ends: the ſeed-veſſel is of a roundiſh figure, pointed at the top, and has the appearance of a berry: the cup is round, ſwoln, and nipp'd at the edge; and it remains when the flower is fallen.

Linnæus places this among the *decandria trigynia*; the threads in each flower being ten, and the ſtyles from the rudiment of the capſule three.

This author joins in the ſame genus, and under the ſame name, many proper ſpecies of *lychnis:* theſe have been deſcribed in their place.

The occaſion is, that he has not obſerved the eſſential and diſtinctive character of the genus, which is, that the capſule has the appearance of a berry. This the right *cucubalus* has, but not any one of all thoſe of the *lychnis* kind: thus properly determined, there is but one known ſpecies of this genus: this has been at all times called by authors by that name; and the name has not been given, till by this writer, to any other.

Berry-bearing Chickweed.

Cucubalus.

The root is compoſed of ſeveral thick, crooked fibres.

The ſtalks are numerous, weak, and ſlender: they ſupport themſelves among buſhes, and will that way grow to a very conſiderable height.

The leaves are large: they ſtand in pairs without footſtalks, and are oblong, broadeſt in the middle, pointed at the end, not at all indented; of a tender ſubſtance, and of a pale green colour.

The flowers grow at the tops of the ſtalks, and of branches riſing from the boſoms of the upper leaves: they are ſmall, and of a greeniſh white, they ſtand in great ſwoln cups, ſomewhat reſembling thoſe of the winter cherry, and only the top of the flower is ſeen out of them.

The ſeed-veſſel is round, but pointed at the end: it is of the bigneſs of a large pea, and, when ripe, of a black colour; ſo that it has greatly the appearance of a berry.

The ſeeds are numerous, ſmall, and black.

It is common in woods and thickets in all the northern parts of Europe; and flowers in July.

C. Bauhine calls it *Alſine ſcandens baccifera:* Dodonæus *Alſine repens.* The common writers, *Berry-bearing chickweed*; a very improper name, but which we retain here, becauſe vulgarly known. It is better to call it *Cucubalus.*

GENUS II.

MITELLA.

THE flower is compoſed of five petals, regularly expanded, with narrow baſes, which are inſerted into the cup: the ſeed-veſſel is globular, but pointed at the end: the cup is compoſed of a ſingle piece, and is hollow, and divided into five ſegments at the edge.

Linnæus places this among the *decandria digynia*; the threads in the centre of the flower being ten, and the ſtyles from the rudiment of the capſule two.

Two-leaved Mitella.

Mitella caule diphyllo.

The root is long, thick, and brown: it runs under the ſurface, and has many large fibres.

The leaves which riſe immediately from it are large, and ſupported on long footſtalks: they are broad, of a duſky green, and a little hairy; ſinuated, and ſharply indented at the edges.

The ſtalk is ſlender, upright, and not at all branched: it is two feet high, and of a pale brown colour.

There are two leaves on it, and they ſtand near its middle, oppoſite to one another, and without footſtalks: they are narrower in proportion to their length than thoſe from the root, and ſharp-pointed: but they are, in the ſame manner, ſinuated, and notched at the edges.

The flowers are placed in a long, ſlender ſpike at the top of the ſtalk, and are very ſmall, and as it were fringed.

The ſeed-veſſel is ſmall, and the ſeeds are round and black.

It is a native of South America, and flowers in June.

Mentzelius calls it *Cortuſa Americana floribus minutim fimbriatis.* Others of the later writers, *Mitella ſcapo diphyllo.*

Its virtues are unknown.

GENUS III.

CALTROP.

TRIBULUS.

THE flower is compoſed of five regular petals evenly diſpoſed: the ſeed-veſſel is angulated and prickly, and contains numerous ſeeds: the cup is formed of a ſingle piece, divided into five ſegments.

Linnæus places this among the *decandria monogynia*; the threads in the center of each flower being ten, and the ſtyle from the rudiment of the fruit ſingle.

1. Common Caltrop.

Tribulus vulgaris.

The root is ſmall, long, white, divided, and furniſhed with many fibres.

The firſt leaves are numerous and pinnated, and very much reſemble thoſe of the common wild vetch: each is compoſed of ſeveral pairs of ſmall leaves, on a middle rib; and theſe are oblong, of a freſh green, and ſharp pointed.

The ſtalks are numerous, weak, ſlender, branched, and ſeven or eight inches high.

The leaves on them are the ſame in form and ſtructure with thoſe from the root, but ſmaller: they ſtand alternately on the lower part of the ſtalk, but frequently are placed in pairs toward the top.

The flowers ſtand on ſhort footſtalks riſing from the boſoms of the leaves, and they are ſmall and yellow.

The ſeed-veſſel is ſhort, angulated, and very prickly; and there are ſome prickles alſo round the upper part of the ſtalk which ſupports it.

It is frequent in the northern parts of Europe, and flowers in June.

C. Bauhine calls it *Tribulus terreſtris ciceris folio fructu aculeato.* Others, *Tribulus terreſtris.*

The ſingular form of this herb, which reſembles the vetch kind, has led all the common writers on plants to place it among that claſs, though the flower and fruit be altogether different. It is not a wonder they who judged only by the general face were deceived in this, for it has all the aſpect of the pulſe kind.

2. Great flowered Caltrop.

Tribulus flore magno.

The root is compoſed of numerous fibres.

The firſt leaves are long, large, and beautifully pinnated; each is compoſed of eight pair of pinnæ, ſet on a double rib, with no leaf, but a ſmall tendril at the end.

The ſtalks are numerous, round, upright, not much branched, and of a pale green.

The leaves on them are placed at diſtances, and reſemble thoſe from the root.

The flowers ſtand ſingly on long footſtalks riſing from the boſoms of the leaves, and they are very large and beautiful: they are of a bright yellow, and are as big as ſmall poppies.

The ſeed-veſſel is ſmall and prickly: the ſeeds are numerous, ſmall, and ſhining.

It is a native of the warmer parts of America, and flowers in July.

Van Royen calls it *Tribulus foliis octoparium conjugatis.*

The *common caltrop* is ſaid to be cooling and aſtringent; but thoſe virtues are not warranted by any known experience. There is another plant called by the old writers *tribulus aquaticus*, and the *water caltrop*; but this is of a different claſs, and is therefore properly diſtinguiſhed by Linnæus by a different generical name, *trapa.*

GENUS

GENUS IV.

WILD RUE.

HARMALA.

THE flower is compoſed of five petals, regularly expanded: the ſeed-veſſel is roundiſh, but ſlightly trigonal, and the ſeeds are numerous and oval: the cup is compoſed of five little leaves, and remains after the flower is fallen.

Linnæus places it among the *polyandria monogynia*; the threads in the centre of the flower being numerous, and fixed to the receptacle, and the ſtyle from the rudiment of the fruit ſingle. This author, inſtead of its moſt received name *harmala*, calls this genus *peganum*.

1. Common Wild Rue.

Harmala vulgaris.

The root is long, thick, and furniſhed with many fibres.

The firſt leaves are large, broad, and divided into numerous, fine, narrow ſegments: they are of a pale green colour, and of a ſtrong ſmell.

The ſtalks riſe in the midſt, and are firm, upright, very little branched, and a foot and a half high.

The leaves on theſe ſtand irregularly, and reſemble thoſe from the root in ſhape.

The flowers are large and white: they ſtand ſingly on long footſtalks, riſing from the boſoms of the leaves.

The ſeed-veſſel is large, and the ſeeds are numerous and ſmall.

It is a native of the Eaſt, and flowers in July.

C. Bauhine calls it *Ruta ſylveſtris flore albo magno*. Others, *Ruta ſylveſtris tenuifolia*, and *Harmala*.

2. Wild Rue, with undivided leaves.

Harmala foliis integris.

The root is long, ſlender, and furniſhed with many fibres.

The firſt leaves are oblong, narrow, of a pale green, pointed at the ends, and not at all ſerrated.

The ſtalks are numerous, ſlender, upright, and of a gale green.

The leaves ſtand irregularly on them, and are oblong, narrow, and ſharp-pointed: they reſemble thoſe of the common milkwort.

The flowers ſtand on ſlender footſtalks riſing from the boſoms of the leaves, and they are white or yellowiſh.

The ſeed-veſſel is large, and the ſeeds are very numerous.

It is a native of Siberia, and flowers in Auguſt.

Amman calls it *Harmala montana polygalæ foliis.*

GENUS V.

MARSH CISTUS.

LEDUM.

THE flower is compoſed of five petals regularly diſpoſed: the ſeed-veſſel is of a roundiſh figure; it contains five cells, and ſplits in five places at the baſe when ripe: the cup is ſmall, and is formed of a ſingle leaf, divided into five ſegments at the edge.

Linnæus places this among the *decandria mongynia*; the threads in each flower being ten, and the ſtyle from the rudiment of the fruit ſingle.

1. Narrow-leaved Marſh Ciſtus.

Ledum foliis anguſtis ferrugineis.

The root is long, thick, divided, and ſpreading.

The ſtem is hard, woody, and covered with a grey bark.

The young ſhoots are long, ſlender, purpliſh, and covered with a white hoary matter: they are thick ſet with leaves, and theſe are long and narrow, reſembling thoſe of roſemary: their ſides are uſually curled up together, and they are covered with a ferrugineous duſt.

The flowers ſtand at the top of the branches in little tufts, and they are large and white.

The ſeed-veſſel is ſmall, and the ſeeds are numerous and brown.

It is frequent in boggy grounds in many parts of North America.

C. Bauhine calls it *Ciſtus ledon roriſmarini foliis ferrugineis*. Comerarius and others, *Roſmarinum ſylveſtre*.

GENUS VI.

GITH.

NIGELLA.

THE flower conſiſts of five petals regularly diſpoſed; and has within it eight glands, that make a very ſingular and beautiful appearance: they are circularly diſpoſed, and are ſhort, and of a labiated form; the upper lip being broadeſt, and is ſpotted; the lower narrower, and plain. The ſeed-veſſel is large, round, and ſwelled in the manner of a bladder, and contains five cells, ſo diſtinct that it may perhaps be more properly ſaid to conſiſt of five ſeparate capſules joined together. The ſeeds are numerous, and there is no cup.

Linnæus places this among the *polyandria polygynia*; the threads in the centre of the flower being numerous, and fixed to the receptacle, and the ſtyles from the rudiment of the fruit alſo numerous.

This genus ſeems to connect together the plants with many capſules to a flower, and thoſe with one. There are ſeveral ſpecies of it; and in ſome the diviſion of the whole is leſs, and in others more diſtinct: in ſome it is a ſingle membranous ſeed-veſſel, divided only into ſeveral cells, in the manner of many of the preceding; and in others it is more and more plainly compoſed of ſeveral ſeparate capſules, which, though firmly connected together, yet are in a manner each perfect and entire.

1. Single blue Nigella.

Nigella flore ſimplici cæruleo involucro folioſo cincto.

The root is long, ſlender, divided, and furniſhed with many fibres.

The firſt leaves grow in a cluſter, and part lie upon the ground, part ſtand erect: they are large, and finely divided into numerous ſegments, which are extremely narrow, and of a dead green.

The ſtalks are numerous, round, firm, upright, and a foot high.

The leaves ſtand alternately on theſe, and perfectly reſemble thoſe from the root, being divided into the ſame narrow and numerous ſegments.

The flower is large, and blue, ſometimes near white, ſometimes of a fine, clear, and ſtrong blue, and ſometimes variouſly ſhaded between theſe two colours.

One flower ſtands uſually at the top of each ſtalk, and at the tops of the branches.

The ſeed-veſſel is large and roundiſh, and contains numerous black, rough ſeeds, in five diſtinct cells.

There ſtand a number of ſmall leaves by way of cup round the flower, for it has no proper cup of its own, and theſe afterwards gather up round the ſeed-veſſels, and make in either ſtate a beautiful appearance.

It is a native of Italy, and other of the warmer parts of Europe: they have it in their corn-fields and vineyards, and it flowers in July.

C. Bauhine calls it *Nigella anguſtifolia flore magno ſimplici cæruleo*. Others, after Mathiolus, *Melanthium ſylveſtre*.

This ſpecies by culture affords the beautiful double kind, which is called the *damaſk nigella*, and by our gardeners the *devil in the buſh*.

2. Single white Nigella.

Nigella flore ſimplici albo nudo.

The root is long and ſlender, and has a few fibres.

The firſt leaves are large, divided into a multitude of ſmall, narrow ſegments, and of a deep green.

The ſtalk is round, firm, upright, and very much branched: it is a foot or more in height, and of a pale green.

The leaves are placed irregularly on it, and in all reſpects reſemble thoſe from the root.

The flowers are moderately large and white: they ſtand ſingly at the tops of the branches, and have not that cluſter of leaves under them which is ſeen in the blue kind.

The ſeed-veſſel is large and oblong, and contains five cells, very plainly diſtinguiſhed on the outſide.

The ſeeds are large and black.

It is a native of the Eaſt, and flowers in Auguſt.

C. Bauhine calls it *Nigella flore minore ſimplici candido*.

This by culture affords alſo double flowers; but they are not ſo large, or nearly ſo beautiful as the others.

3. Spaniſh Nigella.

Nigella flore maximo cæruleo.

The root is long, ſlender, and furniſhed with numerous fibres.

The firſt leaves are very large, and of a deep green; and they are divided into numerous, long, and narrow ſegments.

The ſtalk is round, upright, branched, and a foot and a half high.

The leaves ſtand irregularly on it; and they are of a deep green, and divided in the ſame manner as thoſe from the root, but into broader ſegments.

The flowers ſtand at the tops of the branches ſingly; and they are very large, and of a beautiful blue.

The ſeed-veſſel is large, rounded, and formed into five parts, containing in five cells a great quantity of rough ſeed.

It is a native of Spain, and of other the warmer parts of Europe, and flowers in Auguſt.

C. Bauhine calls it *Nigella latifolia flore majore ſimplici cæruleo*. Others, *Nigella Hiſpanica maxima*; and ſome only *Nigella Hiſpanica*.

4. Broad-leaved white Nigella.

Nigella latifolia flore albo.

The root is long, ſlender, and hung with many fibres.

The firſt leaves are large, and have long foot-ſtalks: they are divided into three principal parts, and thoſe are again notched and ſubdivided; and they are of a duſky green.

The ſtalks are round, weak, and white: they ſtand but imperfectly upright, and are very much branched.

The leaves on theſe are oblong, and divided into broad, notched ſegments, in a pinnated manner.

The flowers ſtand ſingly at the extremities of the branches, and are large and white: they have nothing of that cluſter of leaves under them, which diſtinguiſhes ſome of the others.

The ſeed veſſel is oblong, large, and full of rough ſeed in five cells.

It is frequent in the Greek iſlands, and flowers in Auguſt.

Alpinus calls it *Nigella alba flore ſimplici*. Pona, *Nigella alba Cretica odorata*, the flowers and ſeeds having a fragrant ſmell.

Theſe ſpecies all poſſeſs the ſame virtues, but the firſt deſcribed has them in the greateſt degree. The ſeeds are to be preferred to any other part: they are deobſtruent and diuretic, good in all obſtructions of the viſcera, and againſt the gravel.

Some have recommended this ſeed as a ſpecific againſt agues; but the bark has ſuperſeded all other medicines for that uſe.

The root externally applied, ſtops bleeding. It is a cuſtom in the Eaſt to chew it, and put it up the noſe in hæmorrhages from that part.

It is ſingular, that the flowers of the *blue nigella* afford a green colour. If they are bruiſed and rubbed on linen, they ſtain it to a freſh green, which holds through many waſhings. It would be therefore worth conſidering, whether they might not be uſeful in dying; for the plant is eaſily cultivated, and the flowers are numerous. It would grow on any indifferent light land.

GENUS VII.

BALSAM.

BALSAMINA.

THE flower is compoſed of five irregularly-diſpoſed petals, and has a ſpur behind: the ſeed-veſſel is of a roundiſh form, and the cup is compoſed of two leaves.

Linnæus places this among the *ſyngeneſia polygamia monogamia*, making it the ſame genus with the *impatiens*: but theſe plants, as I have ſhewn already, differ as genera, not as ſpecies of the ſame genus. The form of the ſeed-veſſel alone were ſufficient to eſtabliſh the diſtinction; but there are others obvious enough, and as eſſential.

1. Common Balſam.

Balſamina foliis lanceolatis.

The root is large, thick, and ſpreading.

The ſtalks are thick, fleſhy, and very much branched: they are of a tender ſubſtance, and of a pale green.

The leaves ſtand irregularly on them; and they are long, narrow, and ſharp-pointed, and elegantly ſerrated at the edges: their colour is a freſh green.

The flowers are large and beautiful: they grow ſingly on ſhort footſtalks riſing from the boſoms of the leaves, and they have a ſhort ſpur behind: their colour is naturally a bright red, but they change continually into white and variegated: the ſame plant will frequently afford them at the ſame time many different colours and variegations.

The ſeed-veſſel is roundiſh, and rough; and, when ripe, it burſts open with violence, and ſcatters the ſeed.

It is a native of the Eaſt, but it ſtands the ſummer perfectly well in our gardens. It flowers in July.

C. Bauhine calls it *Balſamina fœmina*. Others only, *Balſamina*. Our gardeners know it by the name of *Balſam*.

GENUS VIII.

PURSLAIN.

PORTULACA.

THE flower is compoſed of five equal petals regularly diſpoſed: the ſeed-veſſel is of an oval figure, and covered; ſplitting in the middle when ripe, and containing numerous ſeeds: the cup is very ſmall, and divided into two parts, and it remains when the flower is fallen.

Linnæus places this among the *polyandria monogynia*; the threads in the centre of the flower being numerous, and fixed to the receptacle, and the ſtyle from the rudiment of the capſule ſingle.

1. Common

1. Common Purſlain.

Portulaca vulgaris.

The root is long, thick, and hung with many fibres.

The ſtalks are numerous, thick, weak, and very much branched: they are of a foot or more in length, and they ſpread themſelves upon the ground: they are of a freſh green colour, and of a thick, fleſhy, tender ſubſtance: ſometimes they are red toward the bottoms, but that more when cultivated than when in the wild ſtate.

The leaves are numerous, oblong, and rounded at the ends: they are very thick and fleſhy, of a pale green, ſometimes rediſh, and of a tender ſubſtance.

The flowers are ſmall and inconſiderable: they are of a faint greeniſh yellow, and ſtand cloſe in the boſoms of the leaves.

The ſeed-veſſel is ſmall, and of an oval figure, and the ſeeds are numerous and minute.

It is a native of the warmer parts of Europe, and flowers in July.

C. Bauhine calls it *Portulaca anguſtifolia ſylveſtris.*

When it is brought into gardens, and enlarged by culture, the leaves grow thicker and broader. In this ſtate it has been deſcribed by many as if a diſtinct ſpecies: they have called it *Portulaca latifolia ſativa*, *Broad-leaved garden purſlain*, in oppoſition to this, which they call the *narrow-leaved wild purſlain*; but there is no more difference than is merely the effect of culture.

It is raiſed for the table, and is cooling, and good againſt the ſcurvy.

2. Hairy Purſlain.

Portulaca piloſa.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalks are numerous and thick: they lie in part upon the ground, and are in part tolerably upright.

The leaves are oblong, narrow, and ſharp-pointed: they ſtand alternately at conſiderable diſtances, and they have a tuft of hairy matter in their boſoms.

The flowers are very ſmall, and of a faint red: they ſtand in the boſoms of the leaves, and particularly at the tops of the ſtalks and branches, where there is a kind of ſpreading head, formed by a large tuft of leaves, with a great deal of hairy matter at their baſe.

The ſtalk is lightly hairy, and the leaves are of a light ſhining green.

It is a native of South America, and flowers in July.

Herman calls it *Portulaca lanuginoſa pſyllii folio erectior, et elatior flore dilute rubente.* Others call it *Portulaca orientalis hirſutofolia.*

GENUS IX.

CORCHORUS.

THE flower is compoſed of five petals regularly diſpoſed: the ſeed-veſſel is very large, and is formed of five valves, and contains five cells: the cup is formed of five ſmall leaves, and falls with the flower.

Linnæus places this among the *polyandria monogynia*; the threads in the centre of the flower being numerous, and riſing from the receptacle, and the ſtyle from the rudiment of the fruit ſingle.

1. Long-fruited Corchorus.

Corchorus foliis crenatis barbatis fructu longo.

The root is long, ſlender, and full of fibres.

The ſtalk is ſtriated, round, upright, a foot and a half high, and divided into many branches.

The leaves ſtand irregularly on it, and they are large, of an oval form, but pointed, and of a pale green.

They are ſharply ſerrated all the way at the edges, and the two points of the ſerratures on each ſide neareſt the footſtalk, run out into each a long, ſlender, hooked filament of a purpliſh colour; this gives them the name of barbated leaves.

The flowers riſe from the boſoms of the leaves: they are ſupported on ſhort footſtalks, and are of a pale yellow.

The ſeed-veſſel is very long and ſlender: it is pointed at the end, and contains numerous ſeeds.

It is a native of Ægypt and Amercia, and flowers in July.

C. Bauhine calls it *Corchorus Plinii.* Others, *Alcea olitoria, ſive corchorus Americana.*

2. Short-fruited Corchorus.

Corchorus fructu brevi foliis oblongis barbatis.

The root is large, and divided.

The ſtem is hard, woody, branched, and covered with a yellowiſh bark.

The leaves are placed irregularly; and they are long, broad toward the baſe, and continued to a narow point: they are ſerrated all the way at the edges, and the two lower ſerratures, as in the former, are continued into ſlender, hooked, or curled filaments.

The flowers ſtand in the boſoms of the leaves, and are ſmall, and of a whitiſh yellow.

The ſeed-veſſel is large, ſhort, and marked on the outſide with five cuts, and in the ſame manner divided into five parts within: the ſeeds are numerous and large.

It is a native of the Eaſt, and of America, and flowers in Auguſt.

Plukenet calls it *Corchorus Americanus prælongis foliis capſula ſtriata ſubrotunda brevi.*

The uſe of theſe plants is for the table, not for medicine.

GENUS X.

HOLLOWLEAF.

SARACENA.

THE flower conſiſts of five petals, which are of an oval figure, and bend inwards: the ſeed-veſſel is roundiſh, and divided into five cells: the flower has two cups; the lower cup is compoſed of three ſmall oval leaves; the upper one is compoſed of five very large and coloured leaves, and both fall with the flower: the leaves are hollow, and have a kind of lip ſurrounding or riſing over the opening.

The flower of this genus is not leſs ſingular than the leaf. We owe the right explanation of its ſtructure to Linnæus, for others have confounded the upper cup with the petals.

That author places it among the *polyandria monogynia*; the threads in the flower being numerous, and riſing from the receptacle, and the ſtyle from the rudiment of the fruit ſingle.

1. Short-leaved purple Saracena.

Saracena foliis gibbis brevioribus.

The root is compoſed of numerous thick fibres.

The leaves that riſe from it are large, and of a very ſtrange and ſingular figure: they are oblong, hollow, and ſwelled; narrow at the baſe, broader and gibbous upward, and toward the top they again grow ſmaller by way of neck: from this part the edge is carried out into a great lip or ear ſurrounding the opening, which is very broad.

The whole leaf is of a duſky green colour, of a very tough and firm ſubſtance, and marked with a number of thick, irregular veins.

The ſtalk riſes up in the midſt of the tuft of leaves, and is ſlender, perfectly upright, and naked.

It ſupports on its top a ſingle flower, which is very large and beautiful: its ſhape reſembles that of the globe flower, and its colour is a faint purple.

The ſeed-veſſel is large, and the ſeeds are numerous, roundiſh, but terminating in a point, and ſmall.

It is a native of America, and grows in wet places. It flowers in July.

Authors have called it by a variety of names.

The firſt knowledge of the plant was from Cluſius, but that was very imperfect. He never ſaw more than a ſingle leaf of it, and the figure of a tuft of theſe with the rudiments of a ſtalk, but without any thing relating to the flower.

This he received from an apothecary of Paris, who had it from Liſbon, but knew nothing more of it: probably it had been brought thither from the Brazils.

This Cluſius publiſhed; and he gueſſed the plant to be a ſpecies of *limonium*, or of ſome genus allied to it. From Cluſius, the figure, deſcription, and name of *limonio congener* got to the common Engliſh writers, who called it alſo *hollow-leaved ſea-lavender*, and the *ſtrange hollow-leaved plant*.

Since this time many of the curious have met with it, and the flower is become known, which we find is not at all leſs ſingular than the leaves: but when the entire plant was ſeen, there was a great deal of perplexity where to put it, and by what name to call it.

Moriſon calls it *Coilophyllum Virginianum breviore folio et flore*. Plukenet, *Bucanephyllum Americanum Limonio congener dictum*. C. Bauhine named it at random, *Limonium peregrinum foliis forma floris Ariſtolochiæ*.

2. Long-leaved yellow Saracena.

Saracena foliis longioribus anguſtis.

The root is compoſed of thick, long, and black fibres.

The leaves riſe in a tuft, and ſtand tolerably erect: they are hollow in the manner of the others, but they are very long, ſlender, and regularly ſhaped: they are ſmalleſt at the baſe, and thence go up gradually encreaſing to the top; ſo that they perfectly repreſent a long, ſlender cone inverted: at the top they are open, and there riſes there a roundiſh, pointed lip, from a ſmall neck: they are of a firm ſubſtance, and deep green, and they have large ribs running lengthwiſe. The round part at the top has alſo ſome large veins, which ſpread from a principal one in the middle.

The ſtalk riſes in the centre of this cluſter, and is naked, ſlender, upright, and of a purpliſh colour at the bottom, and a pale yellowiſh green toward the top.

The flower is very large and yellow: one ſtands at the top of the ſtalk, and no more; its form is the ſame with that of the preceding.

The ſeed-veſſel is round and large, and the ſeeds are very numerous, and of a dark brown.

It is a native of America, and, like the former, lives in wet places. It flowers in July.

C. Bauhine calls this *Thuris limpidi folium*, and it ſtands under the ſame name in Lobel and others. Plukenet calls it *Bucanephyllum elatius Virginianum, ſive Limonio congeneris altera ſpecies foliis triplo longioribus*. Moriſon, *Coilophyllum Virginianum longiore folio erecto, flore luteo*.

The natives have an opinion of the leaves of theſe plants as a ſovereign remedy againſt venomous bites: they boil them in water, and, when they are tender, lay them upon the part; but this has no certain authority as to its ſucceſs. When we became firſt acquainted with that part of the world, there was an opinion that the natives underſtood the virtues of their plants in a particular manner, and great pains were taken to obtain the knowledge from them: but the farther enquiry was made, the leſs dependance it was found could be placed upon their accounts. They had among them people who had the art of impoſing upon the reſt, and this ſkill in herbs was one of the great articles of their pretended knowledge; but it was uſually very little.

The END of the ELEVENTH CLASS.

THE

Berry bearing Chickweed

Common Caltrop

Great flowered Caltrop

Common Wild Fin

Nigella

Nigella

Single White Nigella

Spanish Nigella

Broad leaved White Nigella

Common Balsam

Hairy Purslain

Long fruited Convolvulus

Short fruited Convolvulus

Small Purple Persicaria

long leaved Persicaria

Common Purslain

THE BRITISH HERBAL.

CLASS XII.

Plants whoſe flower is compoſed of SIX PETALS, *and their ſeeds contained in a* SINGLE CAPSULE.

THE plants which compoſe this claſs are very few; yet they are ſo perfectly characteriſed by the number of petals, that they are ſeparated by Nature from all others; and the ſtudent will find great familiarity and eaſe in the diſtinction. They are obviouſly known by this number of their petals; and he is not ſent to look for them among a multiplicity of others, with which ſome have confounded them; but will find them here alone, and in their place, allotted plainly by Nature, after thoſe which have the ſame kind of ſeed-veſſel, and one petal leſs in the flower.

Plainly as theſe genera are characteriſed by Nature, and evidently as ſhe dictates where they ſhould ſtand, Linnæus has diſperſed them in his works, and placed them among thoſe to which they are not in the leaſt allied.

We have but two genera of this claſs natives of Britain, and theſe he has ſeparated from one another by five intermediate claſſes, placing the *ſalicaria* among his *dodecandria*, and the *portula* among his *hexandria*.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are found naturally wild in this country.

GENUS I.

SPIKED WILLOWHERB.

SALICARIA.

THE flower conſiſts of ſix petals regularly diſpoſed: the ſeed-veſſel is ſingle, oblong, and pointed, and the ſeeds are numerous and ſmall: the cup is formed of a ſingle piece: it is hollow and ſtriated, and is divided into ten ſegments at the edge, which are alternately longer and ſhorter.

Linnæus places this among the *dodecandria monogynia*; the threads in the centre of the flower being twelve, and the ſtyle from the rudiment of the fruit ſingle. He takes away its received name *ſalicaria*, and calls it *lythrum*.

DIVISION I. BRITISH SPECIES.

1. Common-ſpiked Willowherb.

Salicaria foliis oppoſitis.

The root is long, thick, and furniſhed with many fibres.

The ſtalks are numerous, firm, large, upright, and five feet high: they are not much branched; they are of an angulated figure, and of a brown colour toward the bottom, and green near the top.

The leaves ſtand in pairs: they are large, and have no footſtalk: they are broadeſt at the baſe, and narrower all the way to the end; not at all notched at the edges, and of a freſh green.

The flowers are large, and of a beautiful purple: they grow in long, thick ſpikes at the tops of the ſtalks, and of many ſhoots that riſe from the boſoms of the upper leaves.

The ſeed-veſſel is large, and the ſeeds are very numerous and ſmall.

It is common by waters, and makes a very elegant figure in autumn when in flower. Many of the American plants we nurſe up for their beauty, are not equal to this weed, nor ſo worthy a place in gardens.

C Bauhine calls it *Lyſimachia ſpicata purpurea forte Plinii.* Cluſius, *Lyſimachia purpurea communis major.* Others ſimply, *Lyſimachia purpurea.*

The root of this plant is a good aſtringent: it does not act with violence; but, being continued in ſmall doſes, ſeldom fails to anſwer its effect in ſtopping purgings or hæmorrhages.

The juice is ſaid to be good againſt inflammations of the eyes; and ſome have recommended the diſtilled water for the ſame purpoſe.

2. Small ſpiked Willowherb.

Salicaria foliis alternis.

The root is long, thick, and furniſhed with large fibres.

The ſtalk is round, upright, firm, branched, and a foot high.

The leaves are placed irregularly, and have no footſtalks: they are oblong, narrow, ſharp-pointed, and of a deep green.

The flowers are ſmall, and of a bluiſh purple: they do not ſtand in long, thick ſpikes at the tops of the ſtalks, but are placed in the boſoms of the upper leaves.

The ſeed-veſſel is ſmall, and the ſeeds are numerous and minute.

It is found in many parts of England, where there have ſtood waters in winter. It flowers in June.

Ray calls it *Salicaria hyſſopifolia.* C. Bauhine, *Hyſſopifolia.* Our people, *Small hedge-hyſſop:* but this is a very improper name, as it confounds it with a genus to which it it not at all allied.

DIVISION II. FOREIGN SPECIES.

Narrow-leaved ſpiked Willowherb.

Salicaria foliis anguſtioribus flore rubente.

The root is long, thick, and furniſhed with large fibres.

The ſtalk is ſquare, firm, upright, and a foot high.

The leaves are narrow, oblong, and pointed: they have no footſtalks, and they are not at all ſerrated on the edges.

They are very irregularly and uncertainly placed on the ſtalk: thoſe toward the bottom are in pairs, or ſometimes three grow at a joint; thoſe on the upper part ſtand alternately.

The flowers are large, and of a bright beautiful red: they do not form a long, compact ſpike, as thoſe of the common kind, but ſtand in the boſoms of the upper leaves in the manner of thoſe of the laſt deſcribed ſpecies.

The ſeed-veſſels are large and pointed, the ſeeds minute and brown.

It is frequent on the ſhores of the Danube, and elſewhere in Europe in the like damp places. It flowers in July.

Cluſius calls it *Lyſimachia purpurea minor.* C. Bauhine, *Lyſimachia rubra non ſiliquoſa.* Others, the *leſſer-ſpiked willowherb*, *Lyſimachia ſpicata minor.*

GENUS II.

WATER PURSLAIN.

PORTULA.

THE flower is compoſed of ſix very ſmall petals, regularly diſpoſed, and inſerted near the edge of the cup: the ſeed-veſſel is heart-faſhioned, divided into two partitions, and full of minute ſeeds: the cup is large, bell-faſhioned, and divided at the extremity into twelve ſegments, which are alternately larger and ſmaller.

Linnæus places this among the *hexandria monogynia*; the threads in the centre of the flower being ſix, and the ſtyle from the rudiment of the fruit ſingle.

He takes away its name *portula*, and calls it *peplis.*

Of this genus there is but one known ſpecies, and that is a native of Britain.

Water

Water Purſlain.

Portula.

The root is compoſed of a few ſmall fibres.

The ſtalks are numerous, round, and weak: they are fleſhy, and of a pale green, and ſometimes purpliſh: many of them lie upon the ground, and take root at the joints: but others ſtand erect; and they are in general about three inches in length, and rarely at all branched.

The leaves are placed in pairs: they are oblong, broad, of an inverted oval figure, and have no footſtalks: their ſubſtance is fleſhy, and their colour a pale green, though, like the ſtalks, they are alſo ſometimes rediſh.

The flowers are ſmall and purple, and ſtand in the boſoms of the leaves.

The ſeed-veſſels are alſo ſmall, and the ſeeds very minute; but the cups are large and very conſpicuous.

It is common in damp places, and flowers in May.

Authors have been much perplexed where to place this little plant, or by what name to call it.

Ray calls it *Portula*, from its having ſomething of the aſpect of *purſlain*. Micheli calls it *Glaucoides paluſtre portulacæ folio floridus purpureis*. Læſelius, *Glaux aquatica folio ſubrotundo*. C. Bauhine, *Alſine minor ſerpylliſolia*.

The people in ſome parts of England give the juice of it againſt the gravel: it operates briſkly by urine.

SERIES II.

FOREIGN GENERA.

Thoſe of which there is no ſpecies native of this country.

GENUS I.

LIONLEAF.

LEONTOPETALON.

THE flower is compoſed of ſix oval petals, alternately larger and ſmaller: the ſeed-veſſel is very large, and roundiſh: it is inflated, and ſomewhat ſucculent, and contains a few large ſeeds: the cup is very ſmall; it is compoſed of ſix leaves; and it falls with the flower.

Linnæus places this among the *hexandria monogynia*; the threads in the flower being ſix, and the ſtyle from the rudiment of the fruit ſingle.

This author takes away its name *leontopetalon*, and calls it, by an arbitrary variation, *leontice*.

1. Broad-leaved Leontopetalon.

Leontopetalon foliis latis.

The root is thick, tuberous, roundiſh, and of a duſky colour.

The firſt leaves are large, broad, and of the compoſite kind: each is formed of five principal parts; two pairs of theſe are diſpoſed in the manner of pinnæ, and the odd one is at the end: on each of the lower pinnæ there are three diſtinct, roundiſh leaves; and the upper pair, and alſo the odd leaf at the top, have a threefold diviſion: they are of a tawny green, whence the plant has been named, as reſembling the colour of the lions hair.

The ſtalk riſes in the midſt of a cluſter of theſe firſt leaves, and is firm, upright, and ſtriated: its colour is the ſame tawney yelloviſh, but is ſtriated with purple.

The flowers are ſmall and yellow: they ſtand in great numbers on the tops of the ſtalk, and of the branches.

The ſeed-veſſel is large, and the ſeeds are roundiſh, and alſo large.

It is a native of the Eaſt, and of the warmer parts of Europe; and flowers in Auguſt.

C. Bauhine calls it *Leontopetalon*; and moſt follow him, adding no diſtinction to the name. Tournefort calls it *Leontapetalon foliis coſtæ alatæ adnaſcentibus*. Our people call it *Lionsleaf*, *Lion-leaved turnip*, and ſome of them the *Black turnip*, and *Lion turnip*.

2. Narrow-leaved Leontopetalon.

Leontopetalon foliis anguſtioribus.

The root is very large, thick, tuberous, irregularly rounded, and of a duſky colour on the ſurface, and rediſh within.

The firſt leaves are numerous, and of a very ſingular form: they are pinnated, but each pair of pinnæ are double; and they are ſo diſpoſed that they ſeem to ſtand croſſwiſe, and do not give the uſual aſpect of a pinnated leaf: they are of a deep duſky green, and are ſinuated at the edges; ſo that they are ſuppoſed to have ſome reſemblance to the oak leaf; but that is not very ſtriking.

The ſtalks are numerous, round, ſtriated, ſlender, and toward the top divided into numerous branches: they are of a yellowiſh colour, and ſtreaked with red.

The flowers are large and yellow: they ſtand at

at the tops of the ſtalks, and at the extremities of the diviſions of the branches.

The ſeed-veſſel is large, oblong, and thick; and the ſeeds are large and roundiſh.

It is a native of the Eaſt, and is there frequent in the corn-fields and other cultivated grounds. It flowers in September.

C. Bauhine calls it *Leontopetalo affinis foliis quernis.* Tournefort, *Leontopetalon foliis caſtæ ſimplici innaſcentibus.* Others, *Chryſogonum dioſcoridis*, and ſimply *Chryſogonum.*

The root of the firſt kind is uſed to take ſpots out of woollen cloths; and it is ſaid to have ſome efficacy in medicine as a diuretick.

The other is not uſed.

GENUS II.

MEDEOLA.

THE flower is compoſed of ſix petals, which turn back: the ſeed-veſſel is large, roundiſh, and divided into three cells, each of which is a ſingle large ſeed: there is no cup.

Linnæus places this among the *hexandria trigynia*; the threads in the flower being ſix, and the ſtyles from the rudiment of the fruit three.

Greeniſh-flowered Medeola.

Medeola floribus vireſcentibus.

The root is large, thick, and has many fibres.

The firſt leaves are large, long, and undivided: they have no footſtalks: they are broadeſt in the middle, and pointed at the end, and undivided at the edges.

The ſtalk is round, upright, firm, and not at all branched.

The leaves on it are, like thoſe from the root, broadeſt in the middle, oblong, ſmall at the baſe, pointed at the end, and of a freſh green.

They are diſpoſed in a ſtellated manner on the ſtalks, ſix or more at a joint, except at the top, where there grow two or three irregularly.

The flowers are ſmall and greeniſh: they grow ſingly on ſlender footſtalks at the top of the main ſtalk, and their petals all turn back: as theſe are green and ſmall, ſome have called them a cup, and ſay the plant has no flower; but this is erroneous.

The ſeed-veſſel is ſmall, and the ſeeds are roundiſh, but dented at one end.

It is a native of Virginia, and flowers in July.

Gronovius calls it *Medeola foliis ſtellatis lanceolatis.*

The END of the TWELFTH CLASS.

THE

THE

BRITISH HERBAL.

CLASS XIII.

Plants with the flower compoſed of NUMEROUS PETALS, *and the ſeeds contained in a* SINGLE CAPSULE.

THIS is a claſs, which, like the former, comprehends but a few plants; but they are ſo perfectly and obviouſly ſeparated by Nature from all others, that whoſoever follows her ſteps muſt thus arrange them diſtinctly.

As we have hitherto alſo purſued her traces through the ſeveral diſpoſitions of plants, which, agreeing in the mark of a ſingle ſeed-veſſel, have from one to ſix petals in each flower, here is the place where the ſtudent will expect to find thoſe genera which, with the firſt grand characteriſtick of a ſingle capſule, have more than ſix petals.

So plain, ſo eaſy, and ſo familiar, is the ſcience of botany, when not encumbered with intricate words, and uſeleſs diſtinctions.

We have, in this, as in the former claſs, but two genera, any ſpecies of which are natives of Britain. Yet theſe two Linnæus has ſeparated by ſeveral claſſes, puting the *hypopitys* among his *decandria*, and the *nymphæa* among the *polyandria*, though both agree in theſe obvious particulars. His method is unhappy that thus reduces him to ſeparate plants the moſt palpably allied, and join them to the moſt unlike.

SERIES I.

BRITISH GENERA.

Thoſe of which one or more ſpecies are natives of this country.

GENUS I.

HYPOPITYS.

THE flower is compoſed of numerous petals, which are ſerrated at their ends: the ſeed-veſſel is oval, and marked with five ridges; and the ſeeds are numerous and light: there is no cup. Some have called the outer petals of the flower by that name; but they err; theſe properly conſtitute a part of the flower, and contain in their baſes, which are hollowed for that purpoſe, its honeyed juice.

Linnæus places this among the *decandria monogynia*; the threads in the flower being ten, and the ſtyle from the rudiment of the fruit ſingle.

This author takes away its received name *hypopitys*, and calls it *monotropa*.

The reader will perceive, in the deſcription of the firſt plant of this genus, a reaſon for not aſcertaining the number of petals in the plants of this, as in thoſe of the preceding claſs: nature does not obſerve that particular here ſo ſtrictly: when the petals in flowers are in a large number they are generally uncertain. In this ſpecies of *hypopitys* the flower which terminates the ſtalk uſually has ten petals, and the others, when there are more, have only eight.

DIVISION I. BRITISH SPECIES.

Yellow Hypopitys.

Hypopitys floribus numerosis flavis.

The root is small, and of an irregular figure.

It lies deep in the ground, and a part of the stalk is buried also with it.

The part of the stalk which appears above the surface is about eight inches in height: it is thick, fleshy, tender, and of a pale yellow colour: it rises upright, and is not at all branched.

The leaves are thin and filmy, and scarce deserve that name: they stand alternately, and adhere to the stalk by a broad base, whence they diminish gradually to a point: they are also of a pale, dusty yellow colour.

The flowers grow in a thick, short spike at the top of the stalk, with many of these filmy leaves among them: they are for the most part covered by these films, and rarely come to perfection, excepting one which terminates the cluster, and is more open to the air: the top usually bends down, but, when the plant is well nourished, it will sometimes stand quite upright.

The flower is of the same yellow colour with the rest of the plant; and, when nicely examined, is found to have the ten petals disposed in two series; the five inner petals are narrower; the five outer ones broader, and protuberant on the outside at the base; within there is a hollow, containing the honey juice: these are the petals some have called leaves of a cup; but their use in carrying this sweet liquor shews them to be a part of the flower.

When the other flowers ripen, they consist of fewer petals, and are smaller: the number usually is eight, sometimes less than that.

The seed vessel is large, and the seeds are very small.

We have it in some large woods in England, but it is not common. Dr. Plot found it in Oxfordshire; Dr. Maningham in Sussex; and Mr. Doody in Hertfordshire. I shewed it in great plenty, in the year 1745, to the Duke of Richmond in Charlton forest, Sussex, whence we endeavoured to make it live in Goodwood gardens, but in vain; we tried it in many parts of the sheltered grounds, but it all failed: though, not improbably, some may have since risen there from the scattered seeds. We found the truth of Mr. Ray's observation, that it begins to smell sweet when it is fading, and not while in its vigour: the scent is agreeable, but very singular.

Mr. Ray erred in the placing of this plant: he has put it among those with four-leaved flowers and a single capsule.

Ray calls it *Hypopitys lutea*. Plot, *Hypopitys lutea verbasculi odore*.

DIVISION II. FOREIGN SPECIES.

1. Hollow-leaved Hypopitys.

Hypopitys foliis cavis.

The root is small, short, thick, notched, and white.

No more than the root is buried in the ground in this species; the whole plant being above the surface, in the usual manner.

The stalks are round, slender, of a pale brown colour, and about four inches high.

The leaves are placed irregularly upon them; and they are oblong, narrow at the base, broader to the end, and hollowed in the manner of a spoon.

They are of the same brown colour with the stalk.

The flowers stand in a short spike at the top, and are not buried among the leaves that rise there, but have short footstalks that thrust them forward, and keep them clear.

They are small, and of a fainter colour than the rest of the plant.

The seed-vessel is large and ribbed; and the seeds are very minute.

It is a native of Virginia, and flowers in August.

Plukenet calls it *Orobanche Verbasculi odore*; and supposes it to be the same with the preceding; but erroneously.

2. Hypopitys with rounded leaves.

Hypopitys foliis subrotundis.

The root consists of a few straggling, irregular fibres.

The stalk is round, slender, upright, and in a manner naked till near the top: its colour is a pale yellow, and it is never at all branched: the height is about six inches.

Toward the bottom of the stalk there stand a few very small films instead of leaves: these are placed irregularly, and at considerable distances.

A little higher up these films grow larger, and are set in pairs; and near the top they spread into small, rounded leaves, placed also in pairs.

The flowers stand at the top of the stalk in a small tuft, or short, thick spike: two of these rounded leaves are situated just under the spike, and usually there are many others among the flowers.

The flowers themselves are small and yellow: the seed-vessels also are small, oval, and striated; and the seeds are very minute.

It is common in the woods of North America, and flowers in July.

Plukenet calls it *Orobanche Virginiana radice fibrosa summo caule foliis subrotundis*. The external appearance of these plants has occasioned most authors to confound them in name with the *orobanche*, or *broomrape*, though the flowers are so perfectly different.

3. Hypopitys with a single drooping flower.

Hypopitys flore solitario nutante.

The root is small and inconsiderable.

The stalk is thick, tender, upright, four inches high, of a pale yellowish colour, and covered with little films by way of leaves.

These are of a paler colour than the body of the ſtalk; and they are ſhorter toward the lower part of the plant, and are there placed much thicker, and cloſer together; and are longer, and more remote toward the top.

This ſpecies naturally produces only a ſingle flower: it is placed, not at the extremity of the ſtalk, but near it; and as the whole top bends, this flower hangs downward: it is very large, and of a beautiful ſtraw colour: it is compoſed of ten petals in two ſeries, as in the others of this genus; but the inner five are ſmall, and are ſometimes wanting: this has occaſioned ſome who have ſeen it to call the flower *penta-petalous*; but its proper number of petals is ten, as in the reſt of this genus.

The ſeed veſſel is large and ſtriated: the ſeeds are numerous and ſmall.

It is a native of North America, and flowers in April.

Gronovius calls it *Monotropa flore nutante.*

We have no knowledge of the virtues of theſe plants, nor do they ſeem to poſſeſs any worthy enquiry.

GENUS II.

WATER-LILLY.

NYMPHÆA.

THE flower is compoſed of numerous petals, regularly diſpoſed, and fixed to the ſide of the germen: the ſeed-veſſel is large and oval, with a narrow neck; it is juicy, and contains a pulpy matter, with numerous large ſeeds: the cup is large and coloured; it is compoſed of five, or in ſome ſpecies, only of four leaves; and it remains with the fruit after the flower is fallen.

Linnæus places this among the *polyandria monogynia*; the threads in the flower being numerous, and fixed to the receptacle, and the ſtyle from the rudiment of the fruit ſingle.

DIVISION I. BRITISH SPECIES.

1. White Water-lilly.

Nymphæa alba.

The root is very long, large, and thick: it is brown on the outſide, and white within; and has numerous large and long fibres.

The leaves are ſupported on ſingle footſtalks: theſe are round, thick, ſpungy, and of a great length; riſing from the ſurface of the mud uſually, to the top of the water, whereon the leaves float.

Theſe are very large, and roundiſh, and of a beautiful green colour, and ſhining ſurface.

The flowers are ſupported, like the leaves, each on a long footſtalk.

They are very large, and of a beautiful bright white; and of a light, but agreeable ſmell: the cup has four leaves.

The ſeed-veſſel is large, and roundiſh, but drawn in at the neck, and there crowned with a dentated rim.

The ſeeds are large, roundiſh, and contained in a great quanitty of pulp.

It is common in our brooks and rivers, and flowers in Auguſt. C. Bauhine calls it *Nymphæa alba major*. Others, only *Nymphæa alba*.

The root of this ſpecies is greatly recommended as cooling and aſtringent.

The country people give the juice of it for the fluor albus, with ſucceſs. The powder of it dried is good againſt weakneſſes in the ſeminal veſſels.

The freſh roots, ſliced and infuſed in red wine, are uſeful againſt overflowings of the menſes.

Outwardly the leaves are cooling; and an oil is made, by ſome, of the flowers, which is excellent againſt pain.

There is an opinion of the roots and ſeeds having a power to prevent venereal deſires; but this is idle.

2. Yellow Water-lilly.

Nymphæa lutea.

The root is very long and thick, of a ſmooth ſurface, except that the outer ſkin in ſome places cracks and chops; and of a white colour: it ſends out numerous large fibres, and itſelf runs obliquely into the mud.

The leaves are ſupported each on its ſeparate footſtalk: theſe are very long, light, ſmooth, and full of a ſpungy pith: the leaves themſelves are very large, and of an oblong figure, but approaching to round, and of a bright green colour.

The flowers are alſo ſupported ſingly on very long footſtalks: they are large; but what appears at firſt ſight to be the flower is, in this, as in the preceding ſpecies, the cup: this is compoſed of five leaves, which are very broad and yellow, and ſurround the petals: theſe are ſmall, and they are alſo yellow; and they are placed in two ſeries.

The ſeed-veſſel is large, and of a pear-faſhioned ſhape; and the ſeeds are round, large, and ſurrounded with a pithy matter.

It is common in large waters, where, if they be not deep, the leaves and flowers riſe above the ſurface; though the plant will flower and ripen its ſeeds when many feet under water.

C. Bauhine calls it *Nymphæa lutea major*. Others, ſimply *Nymphæa lutea*.

There is another plant called *Yellow water-lilly* by the common writers, and diſtinguiſhed by the more accurate, under the name of *Nymph. oides*, the *Yellow water-lilly with fringed flowers*, but this, being of a different claſs, has been deſcribed before, in its place.

DIVISION II. FOREIGN SPECIES.

1. The Egyptian Lotus.

Nymphæa foliis cordatis dentatis.

The root is very large, thick, and of an oblong form, and covered with fibres.

The leaves are supported singly on long, slender footstalks.

They are very large, and of a heart fashioned shape; being deeply cut at the base, where they are broadest, and thence smaller to the end: they are sharply dentated on the edges, and of a fleshy substance and bright green colour.

Their footstalks are long, as those of our *common water-lilies*; and they are smooth on the surface, and of a deep green.

The flowers are large and white: they are supported singly on slender footstalks, much longer than those of the leaves, and are composed of many petals, placed in numerous series, and surrounded by a cup composed of four leaves, as in the *common white water lilly*.

The seed-vessel is very large, round, but drawn up to a neck at the top, and full of a spungy matter, with many large seeds: the large cup remains with this, and is spread out under it, in the manner of the rays of a star.

Alpinus calls it *Lotus Ægyptia*; a name most authors have copied from him. Sir Hans Sloane, *Nymphæa Indica flore candido, folio in ambitu serrato*. Others, *Ambel*.

It is a native of Egypt, the East Indies, and the hotter parts of America, and flowers in autumn.

The root, which is of the shape and size of a large egg, is a delicacy with the people of the East, and accounted a very wholesome and delicate food: they boil it, and eat it with the liquor. It is so extremely abundant in the Nile, that it serves as a kind of universal food to the poor, who have nothing to do but go into the places where the water is shalloweſt, and take up in an hour or two food for many days for their families.

2. Great red Water-lilly, called the Ægyptian bean.

Nymphæa pediculis spinosis flore rubente.

The root is large, thick, and hung with numerous long fibres.

The leaves are supported on long footstalks, in the manner of those of the *common water-lillies*, and are, like them, of a round form, and great bigness; but though they agree thus with the others in the general shape and manner of appearing, they differ in very essential particulars.

The footstalks of the leaves are full of small prickles, all pointing upwards, and the leaf itself is umbilicated; the stalk not being inserted at the edge, as in the others, but in the centre of the leaf.

The flowers are very large, and of a bright and elegant red: they are composed of several series of petals, and are supported each on a long prickly footstalk, as the leaves.

The seed-vessel is very large, and of a singular form: it seems as if it had been cut off at the top, and there are in it several cells, each of which contains one seed.

These are as large as the biggest filbert, and of a browniſh red colour on the outside, but white within.

The whole fruit is of a spungy substance, and the seeds are soft.

It is a native of the East Indies, and other warm quarters of the world. It flowers in July.

Herman calls it *Nymphæa Indica faba Ægyptia dicta flore incarnato*. Others call it simply, *Faba Ægyptiaca*; and some after its Eastern name *nelumbo*.

We see the figure of this plant frequently in the Chinese works on porcelain, and in their japan, and many held it to be imaginary; but later observations have shewn it to be the representation of a real plant, very common in their waters, and familiarly known to the ancients. It is what all the old writers have meant by the *faba Ægyptia*.

The END of the THIRTEENTH CLASS.

THE

Common spiked Willow herb.

Small spiked Willow herb.

Narrow leav'd spiked Willow herb.

Water Purslain.

Broad leav'd Leontopetalon.

Narrow leav'd Leontopetalon.

Greenish flower'd Medeola.

Yellow Hypoputis.

Hollow leav'd Hypoputis.

Hypoputis with rounded Leaves.

Single flower'd Hypoputis.

White Water Lilly.

Yellow Water Lilly.

The Egyptian Lotus.

The Flower of the Egyptian Lotus in its natural size.

The Fruit of the Egyptian Lotus with the Cup —

The Root and Water Lilly called the Egyptian Bean

Nymphæa

THE

BRITISH HERBAL.

CLASS XIV.

Plants that have the flower compoſed of FOUR PETALS, *diſpoſed in form of a croſs, and the ſeed-veſſel* SINGLE, *and of an* IRREGULAR *form.*

WE have in the preceding claſſes arranged thoſe genera which have a ſingle capſule for the ſeeds, of a plain and ſimple ſtructure, according to the number of petals in the flower preceding that ſeed-veſſel; from thoſe which have only one, by regular ſteps proceeding to ſuch as have it compoſed of an irregular and uncertain large number.

In theſe claſſes we have treated of thoſe genera whoſe ſeed-veſſels have nothing particular in their form, nor have been uſed to be diſtinguiſhed peculiarly by authors under any diſtinctive name: but there yet remain ſome to which we are, according to Nature, and the cuſtom of botaniſts of all time, founded on natural diſtinctions, to give a peculiar place.

What are commonly called the *ſiliquoſe* and *ſiliculoſe plants*, are perfectly diſtinguiſhed from all others, and held ſeparate by writers; and in the ſame manner the papilionaceous: yet each of theſe claſſes conſiſt of plants which have a ſingle ſeed-veſſel. Theſe therefore, as alſo the berry-bearing plants, diſtinguiſhed from all others in the ſame manner by the ſtructure of their fruit, we are to treat of diſtinctly, each in its ſeparate claſs; and between the firſt of theſe the ſiliquoſe, and the laſt of the former regular ſeries, we are to introduce a ſmall claſs, which naturally leads to them.

The ſiliquoſe are thoſe which have the flower compoſed of four petals, diſpoſed croſs-ways, and the ſeed-veſſel a regular pod: thoſe of the preſent claſs have the flower in the ſame manner, compoſed of four petals ſo diſpoſed, and have for their fruit a ſeed-veſſel which is not a regular pod.

Linnæus has diſperſed theſe over his works; and Mr. Ray has committed an overſight, in reſpect of the ſeveral firſt genera, placing them among the plants with five-leaved flowers.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this country.

GENUS I.

PEARLWORT.

ALSINELLA.

THE flower is compoſed of four petals regularly diſpoſed: the ſeed-veſſel is round, membranaceous, and full of minute ſeeds: the cup is compoſed of four little leaves, and remains when the flower is fallen.

Allſeed.

Radiola.

The root is ſmall, and furniſhed with many fibres.

The ſtalk is round, and divided into a vaſt multitude of branches. The whole plant is not more than an inch high.

The leaves ſtand in pairs, and they are of a duſky green, ſhort, and broad.

The flowers are very ſmall, and white; and they ſtand in cluſters at the tops of the branches.

The ſeed-veſſels are large and brown; and the ſeeds minute.

It is not uncommon on heaths, and flowers in July.

Ray calls it *Radiola vulgaris ſerpyllifolia*. Others, *Hernaria minima*.

SERIES II.

FOREIGN GENERA.

Thoſe of which there is no ſpecies native of this country.

GENUS I.

BARRENWORT.

EPEMEDIUM.

THE flower is formed of four petals, regularly diſpoſed: the ſeed-veſſel is long, ſlender, pointed at the end, and made of two valves, containing numerous ſeeds in a ſingle cell: the cup is compoſed of four leaves, and falls with the flower.

Linnæus places this among the *tetrandria monogynia*; the threads in the centre of the flower being four, and the ſtyle from the rudiment of the fruit ſingle.

Of this genus there is but one known ſpecies.

Barrenwort.

Epimedium.

The root is ſlender and creeping, and is hung about with numerous fibres.

The firſt leaves ſtand on long, ſlender, and divided footſtalks, and there are uſually three on each diviſion.

They are heart-faſhioned, deeply cut in at the baſe, and thence ſmaller to the extremity; and are very ſharply ſerrated round the edges.

The ſtalk riſes among theſe, and is round, firm, upright; not at all branched, and a foot high.

There uſually ſtands one of theſe compound leaves upon it, conſiſting of five ſingle ones, each on its own ſeparate footſtalk; and theſe are, like thoſe from the root, heart-faſhioned, ſerrated, and pointed.

The flowers ſtand at the top of the ſtalk in a kind of ſpike, and each has its ſeparate, ſlender footſtalk: they are of a deep purple, with an edge of yellow.

The ſeed-veſſel is long and ſlender, and the ſeeds are oblong and ſmall.

It is a native of many of the northern parts of Europe, and lives in the damp parts of foreſts.

It flowers in Auguſt.

All authors call it *Epimedium*; the plant being ſo ſingular that it needs no diſtinctive epithets.

It has been ſaid to be a native of this kingdom, but not truly.

Its virtues are not certainly known.

GENUS II.

PODDED CUMMIN.

HYPECOUM.

THE flower is compoſed of four petals of unequal ſize: two of theſe are larger, and divided each into three parts; and theſe ſtand more outwards: the other two ſtand inwards, and are ſmall, and divided ſlightly into three parts at the top; the middle ſegment being hollowed, compreſſed and erect: the ſeed-veſſel is long, crooked, and jointed: the cup is compoſed of two little leaves, and falls with the flower.

Linnæus places this among the *tetrandria digynia*; the threads in the centre of the flower being four, and the ſtyles from the rudiment of the fruit two.

1. Common Podded Cummin.

Hypecoum vulgare.

The root is long, thick, and furniſhed with many fibres.

The leaves that riſe from it are large, and beautifully divided into ſegments: they are of the pinnated form, but each of the pinnæ of which they are compoſed, is again divided into ſmaller parts; and they are deeply notched at the edges: the whole leaf is of a pale bluiſh or yellowiſh green; and its pedicle is often rediſh toward the ground.

The ſtalk is round, ridged, upright and of a pale colour: often it is flatted. Toward the lower part it is ſimple, and uſually naked: higher up it has ſeveral leaves; and toward the top it divides into branches.

The leaves on the ſtalk are like thoſe from the root, only ſmaller.

The flowers are moderately large, and of a bright yellow: they ſtand on ſlender footſtalks at the extremities of the branches.

The ſeed-veſſel is long, crooked, and jointed; and in each joint there is contained a ſingle oblong ſeed.

It is common in the ſouthern parts of Europe, and flowers in July.

C. Bauhine calls it ſimply *Hypecoum*; and moſt authors follow him. Others call it *Hypecoum ſiliquis articulatis.*

2. Podded Cummin with ſmooth pods.

Hypecoum ſiliquis teretibus lævibus.

The root is long, ſlender, and furniſhed with numerous fibres.

The firſt leaves are long, narrow, and pinnated: each is compoſed of four, five, or more pairs of pinnæ on a long middle rib, with an odd one at the end; and they are all very deeply indented, ſome of the lower ones down to the rib: the colour of the whole leaf is a freſh and beautiful green.

The ſtalks are ſlender, round, upright, and ten inches high.

The leaves on them reſemble thoſe from the root, but that they are ſmaller and of a paler colour, and are more deeply indented.

The flowers ſtand at the tops of the ſtalks; and they are ſmall and yellow.

The ſeed-veſſel is a long pod, not jointed, as in the *common hypecoum*, but ſmooth: it is frequently a little crooked, and always hangs down.

The ſeeds are numerous, oblong, and yellowiſh.

It is frequent in many parts of Europe, and flowers in July.

Daleſchamp calls it *Cuminum ſylveſtre ſiliquatum*; and others have followed him.

GENUS III.

LUDWIGIA.

THE flower is formed of four petals regularly diſpoſed: the ſeed-veſſel is compoſed of four valves: the cup is divided into four long and narrow ſegments, which appear between the petals of the flower, and remain when it is fallen.

Linnæus places this among the *tetrandria monogynia*; the threads in the centre of the flower being four, and the ſtyle from the rudiment of the fruit ſingle.

Alternate-leaved Ludwigia.

Ludwigia foliis anguſtis alternis.

The root is compoſed of numerous long fibres riſing from a ſmall head.

The ſtalk is round, firm, upright, ſtriated, and of a yellowiſh colour.

The leaves are placed alternately upon it; and they are long, narrow, and ſharp-pointed; and have no footſtalks.

The flowers grow toward the tops of the ſtalks, and of the branches riſing from the boſoms of the upper leaves: they are placed ſingly in the boſoms of the leaves on theſe parts of the plant; and are large and yellow.

The ſeed-veſſel is ſquare and large: it is open at the top, and it contains numerous ſmall ſeeds.

It is a native of Virginia, and flowers in July.

Plukenet, calls it *Lyſimachia non papoſa flore luteo majori ſiliqua caryophylloide Virginiana.* Gronovius calls it ſimply, *Ludwigia.* Van Royen, *Ludwigia capſulis ſubrotundis.*

Its virtues are unknown.

GENUS IV.

OLDENLANDIA.

THE flower conſiſts of four petals regularly diſpoſed, and ſpread open: the ſeed-veſſel is round and coriaceous, and contains numerous ſmall ſeeds in two cells: the cup is divided into four narrow ſegments, and remains when the flower is fallen.

Linnæus places this among the *tetrandria monogynia*; the threads in the flower being four, and the ſtyle from the rudiment of the fruit ſingle.

1. Broad-leaved Oldenlandia.

Oldenlandia foliis latioribus.

The root is compoſed of a few ſmall fibres.

The ſtalks are numerous, weak, ſlender, and in great part procumbent: they take root at the joints as they lie, and by this means ſpread the plant abundantly.

The leaves are placed in pairs, and have ſhort footſtalks: they are oblong, broad, and of a faint green: they are largeſt in the middle, pointed at the ends, and not at all notched at the edges.

The flowers grow in the boſoms of the leaves: they are placed on ſhort footſtalks, one flower on each; and they are ſmall and white.

The ſeed-veſſel is large, and contains a number of ſmall, brown ſeeds.

It is frequent in North America in damp places. It flowers in June.

Plukenet calls it *Alſine aquatica major repens Virginiana foliis acuminatis.* Others, *Oldenlandia uniflora*, from the flowers ſtanding ſingly on the footſtalks in this ſpecies; they ſupporting more in the others.

2. Narrow-leaved Oldenlandia.

Oldenlandia anguſtifolia.

The root is ſmall, oblong, and furniſhed with many fibres.

The ſtalks are numerous, ſlender, round, firm, upright, and branched: they are of a browniſh colour, and brittle.

The leaves are placed in pairs, and have tufts of young ones, or the rudiments of branches, in their boſoms all the way up the ſtalk: they are long, narrow, and ſharp-pointed; and are of a duſky green.

The flowers ſtand at the tops of the ſtalks, and of ſhoots riſing from the boſoms of the upper leaves, in cluſters like little umbells; and they are ſmall.

The ſeed-veſſel is large, and the ſeeds are numerous and little.

Plukenet calls it *Lyſimachiæ affinis ſaturiæ folio madera ſpatenſis capſulis in ſumitate fere umbellatis.* Others, *Oldenlandia umbellata.*

Its virtues are not known.

GENUS V.

AMMANIA.

THE flower conſiſts of four petals regularly diſpoſed, and inſerted into the cup: the ſeed-veſſel is round, and contains four cells: the cup is hollow, ſtriated, and quadrangular: it is divided into eight ſegments at the edge, and four of theſe are ſhorter than the others, and are turned back.

Linnæus places this among the *tetrandria monogynia*; the threads in the centre of the flower being four, and the ſtyle from the rudiment of the fruit ſingle.

Narrow-leaved Ammania.

Ammania foliis anguſtis.

The root is long, ſlender, divided, and furniſhed with numerous fibres.

The ſtalk is round, upright, firm, and extremely branched: it is of a rediſh colour, and tough; and its branches are extremely long and ſlender.

The leaves are placed in pairs, and they are oblong, very narrow, ſharp-pointed, and without footſtalks.

The flowers are placed in cluſters in the boſoms of the leaves; and they are ſmall, and of a bright yellow: the plant when in flower makes a beautiful appearance; for it is covered at the joints from the root to the very top.

The ſeed-veſſels are round and ſmall; and the ſeeds are minute and numerous.

It is a native of the Eaſt Indies, and flowers in June.

Plukenet calls it *Anonymos linariæ folio orientalis Gallii lutei flore herba capſularis verticillata.*

Its virtues are unknown.

GENUS VI.

WATER CALTROP.

TRAPA.

THE flower conſiſts of four petals regularly diſpoſed: the ſeed-veſſel is of an oblong oval form, very hard, and contains only a ſingle cell; and it is armed with four ſharp thorns: the cup is made of a ſingle piece divided into four narrow ſegments: it remains after the flower is fallen; and the ſegments hardening, become the thorns of the ſeed-veſſel.

Linnæus places this among the *tetrandria monogynia*; the threads in the centre of the flower being four, and the ſtyle from the rudiment of the fruit ſingle.

This author has taken away its common name *tribulus aquatica*, and calls it *trapa*: this is very proper, becauſe another plant of a very different genus is called *tribulus terreſtris*. We have retained the name *trapa*; keeping with it the Engliſh received name *water caltrop*.

Of this genus there is but one known ſpecies.

The Water Caltrop.

Trapa.

The root is very long, ſlender, and hung with a multitude of fibres.

The leaves are numerous, and each is ſupported on a long, ſlender footſtalk: they are broad, ſhort, and in figure half round; being flat where they join the ſtalk, and rounded each way from thence: they are of a fleſhy ſubſtance and of a dead green.

The footſtalks are round, ſmooth, light, and hollow.

The flowers riſe among the leaves, and are ſupported each on a ſingle, naked footſtalk, nearly as long as thoſe of the leaves: they are large and white.

The ſeed-veſſel is large, and extremely hard: it is armed with four very ſtrong and ſharp prickles, and contains only one ſeed. The kernel is very ſweet: it has the taſte of a cheſtnut.

It is frequent in the warmer parts of Europe, and in the Eaſt, and will live in the ſalt, as well as freſh, water.

All the writers call it *Tribulus aquaticus*, or *Trapa*.

The fruit is pleaſant and nouriſhing. It is eaten in ſome places as a delicacy, and in others as a neceſſary food; being ground to a kind of flour and made into bread.

The END of the FOURTEENTH CLASS.

THE

THE

BRITISH HERBAL.

CLASS XV.

Plants whoſe flower is compoſed of FOUR PETALS *regularly diſpoſed, in form of a croſs, and whoſe ſeeds are contained in a* REGULAR POD, *of a long and ſlender ſhape.*

THE plants of this claſs are ſo eſſentially and obviouſly diſtinguiſhed from all others, and ſo happily united among themſelves, that moſt of the botanical writers have kept them together, and in a diſtinct claſs.

Ray calls them *herbæ tetrapetalæ ſiliquoſæ*; and Tournefort, *herbæ flore polypetalo cruciformi*. Linnæus diſtinguiſhes them by the name of *tetradynamia*; the threads in the flower being uſually ſix, and of theſe, four being always longer than the reſt: theſe four he eſteems more efficacious in the fœcundation of the ſeeds; and thence has named the claſs.

This author places in the ſame claſs thoſe genera which have ſhort, and thoſe which have long, pods, only diſtinguiſhing them as belonging to two ſections. Mr. Ray has done this before him, and ſo have many others: but the diſtinction between the ſeveral genera is ſo plain, and ſo well obſerved by nature, that they demand in a juſt method to be arranged under two diſtinct claſſes.

The very authors who place them together, always ſeparate them by a ſubdiviſion; and they are diſtinguiſhed by eſtabliſhed titles univerſally received, and univerſally underſtood; thoſe which have long pods being called *herbæ ſiliquoſæ*, and thoſe which have ſhort ones, *herbæ ſiliculoſæ*.

We are unhappy in the Engliſh language in a dearth of ſcientifick terms: we have no names or words that diſtinctly convey the ſenſe of *ſiliqua* and *ſilicula*, on which this ſeparation is founded; we only call them long pods and little pods; but the term *ſilicula* is not in this caſe ſimply a diminutive; for the ſhort pod differs in form as well as ſize from the other.

There is an antiquated word, *ſhale*, uſed by ſome authors of credit, and adopted by our dictionaries, for a huſk, or covering of ſeeds: we ſhall, in this want of terms for diſtinction, appropriate it to the ſhort ſeed-veſſel, called in Latin *ſilicula*, and call the other only a pod.

Thus, having eſtabliſhed words to aſcertain our meaning in each article, we ſhall follow the ſteps of nature in the diviſion of theſe plants, making thoſe with pods, *ſiliquæ*, conſtitute one claſs; and thoſe with *ſhales ſiliculæ*, another.

Common Pearlwort

Thick leavd Pearlwort

Annual Pearlwort

Allseed

Slender Upright Pearlwort

Tall Long leavd Pearlwort

Narrow Leavd Pearlwort

Upright Branched Pearlwort

Barrenwort

Common Pedated Cammin

Pedated Cammin with Smooth pods

Broad Leavd Otaheitanda

Narrow Leavd Otaheitanda

Narrow leavd Ammania

Alternate Leavd Ludwigia

Water Calerp

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally found wild in this country.

GENUS I.

WALLFLOWER.

LEUCOIUM.

THE flower is compoſed of four large petals: the pod is long, ſlender, flatted, formed of two valves, containing two cells, and terminated by a ſtyle, which is ſplit at the top: the cup is compoſed of four long, narrow leaves, and falls with the flower: the ſeeds are oval and flatted.

Linnæus places this, with the reſt of the *ſiliquoſe* plants, among the *tetradynamia ſiliquoſa:* but he aboliſhes its received name *leucoium*, calling it *cheiranthus*.

There is one ſingular plant of this genus, the pod of which, inſtead of terminating in two, has three points. Many have of late made of this a particular genus, under the name of *gakenia*; but Linnæus much more juſtly refers it to the reſt, not allowing this alone a ſufficient diſtinction for a new genus.

The botaniſts of late time have accounted it an honour to conſtitute new genera; and have therefore ſought the moſt trivial marks for a diſtinction, which ought to be founded only on the greateſt and moſt obvious.

The Arabians call the common yellow *wallflower*, *cheiri*; but it is wrong from that to derive the name *cheiranthus* for the whole genus.

DIVISION I. BRITISH SPECIES.

1. Common Wallflower.

Leucoium luteum vulgare.

The root is divided into a number of long, ſtraggling parts, each furniſhed with numerous fibres.

The ſtalk is round, firm, upright, hard, and very much branched.

The leaves are long, narrow, and of a freſh green: they have no footſtalks; they adhere by the baſe, and they are undivided at the edges.

The flowers grow in a kind of ſpikes at the top of the ſtalks and branches; and they are large, yellow, and ſweet ſcented.

The pods are long, ſlender, and whitiſh: the ſeeds are flatted and ſmall.

It is common on old walls, and in ſome places on rocks; and has thence, for its beauty and fragrance, been introduced into gardens, where the flower, and indeed the whole plant, grow much larger than in the wild ſtate.

C. Bauhine calls it *Leucoium luteum vulgare*; and moſt others follow him.

When carefully cultivated the flower gets ſtreaks of a rediſh or deep orange colour; and at other times it is rendered large and full of leaves: theſe are the *bloody wall* and the *double wall* of our gardeners.

It were well if we could accuſe none above the rank of gardeners with raiſing theſe varieties into the imaginary place of ſpecies; or if theſe were all ſo treated. We ſee more of them, and in conſiderable writers.

C. Bauhine deſcribes, 1. one with ſerrated leaves; 2. one with great flowers; 3. a great, double; and, 4. a leſſer, double *wallflower:* theſe are all varieties owing to culture; and thus of one plant are made five.

2. Sea Wallflower.

Leucoium maritimum ſiliquis tricuſpidatis.

The root is long, ſlender, and furniſhed with a few fibres.

The ſtalks are numerous, weak, and branched: they ſtand but irregularly upright, and they are of a pale colour, and a little hairy.

The leaves ſtand irregularly, and are long, narrow, and deeply indented at the edges: they grow without footſtalks, and are ſomewhat hairy, and their colour is a pale whitiſh green.

The flowers ſtand at the tops of the ſtalks and branches; and they are large and white.

The ſeed-veſſels are long, ſomewhat thicker than in the common kind, and hairy; but what is very ſingular in them is, that each terminates in three points, inſtead of the two of the common kind.

The ſeeds are ſmall, oval, and flatted.

It is found on the coaſts of Wales and Cornwal; and flowers in July.

C. Bauhine calls it *Leucoium maritimum ſinuato folio.*

We have this in ſome gardens in its natural condition; and we ſee it in others raiſed to a greater ſize, and into varieties, called diſtinct ſpecies by ſome, from culture.

What we call ſtock Julyflowers are of the ſame genus with *wallflowers*, differing only as ſpecies, though the diſtinction be very evident.

These two plants are the only natives of our country; the firſt is the mother plant of all that variety of *walls* in our gardens; and the latter of ſome of the *ſtocks:* thus our people abbreviate the proper expreſſions of the kinds. The latter is plainly of the ſtock Julyflower, or, as it is vulgarly expreſſed, the *ſtock* kind.

Great virtues have been attributed to the *leucoium*; but they are at preſent not much regarded. The flowers are celebrated againſt diſorders of the head and nerves, and not without ſome foundation in truth. A conſerve of them is the beſt method of taking them.

The tops of the plant are ſaid to be promoters of the menſes; and the ſeeds have been recommended in paralitick caſes. The *common wild wallflower* is beſt.

DIVISION II. FOREIGN SPECIES.

1. Square-podded Wallflower.

Leucoium ſiliquis quadratis.

The root is long, thick, and furniſhed with numerous fibres.

The firſt leaves riſe in a large tuft, and are long, narrow, of a faint green, and without footſtalks.

The ſtalk is firm, upright, ſingle, and ſcarce at all branched, and is of a pale colour, and a foot and half high.

The leaves are numerous; they are long, narrow, hollowed, and have uſually a dented edge: they are ſharp-pointed, undivided at the edges, and of a pale green.

The flowers are yellow and fragrant, like thoſe of the *common wallflower*, but ſmaller.

The ſeed veſſels are ſquare, and the ſeeds are rounded and flat.

It is frequent on barren grounds in France and Italy; and flowers early in ſummer.

C. Bauhine calls it *Leucoium luteum ſylveſtre anguſtiſolium.* Others, *Leucoium ſylveſtre.* Our gardeners, the *Upright wallflower.*

2. Common Stock Julyflower.

Leucoium incanum vulgare.

The root is large and ſpreading.

The ſtalk, or, as it may be better termed, the main ſtem, is round, thick, white, naked for a conſiderable height, and from thence upwards divided into numerous branches, and crowded with leaves. The plant grows to two feet or more in height, and has the aſpect of a little ſhrub.

The leaves ſtand irregularly on it: they are numerous, long, narrow, and hoary; of a pale greyiſh green, ſoft to the touch, not at all divided at the edges, and blunt at the points.

The flowers ſtand in a kind of ſpike at the tops of the ſtalks, and are large and handſome: their natural colour is a deep purple, and they are ſometimes white.

The ſeed-veſſel is flatted, and as it were cut off at the top: the ſeeds are ſmall and flatted.

It is a native of Spain, and thence brought into our gardens, where, in this natural ſtate, it is called the *ſtock Julyflower*, or *ſingle ſtock.* Culture doubles ſtripes, and enlarges the flowers; and in theſe ſeveral appearances it is deſcribed by ſome, too attentive to frivolous diſtinctions, under the names of ſo many diſtinct ſpecies.

As the *common Engliſh wallflower* is the origin of all the *walls* of our gardens, this Spaniſh kind is the ſource from whence induſtrious art has produced all the double, and otherwiſe varied *ſtocks.*

C. Bauhine calls this *Leucoium incano ſolio ſhortenſe.* Lobel, *Viola alba.*

3. Little Stock with dentated leaves.

Leucoium minus dentatis foliis.

The root is compoſed of a few fibres.

The ſtalk is ſlender, upright, of a whitiſh colour, and a foot high.

The leaves are numerous, and placed irregularly: they are long, narrow, and of a greyiſh colour, hoary, and ſoft; and they are dentated at the edges.

The flowers ſtand at the tops of the ſtalks in a kind of looſe ſpikes; and they are ſmall, and of a pale purple.

The ſeed-veſſels are long, rounded, and ſharp at the point.

The ſeeds are oval and flat.

It is a native of the coaſt of Spain, and flowers in July.

C. Bauhine calls it *Leucoium incanum minus.*

4. Narrow-leaved ſea Stock.

Leucoium maritimum foliis anguſtis.

The root is large and ſpreading.

The ſtalk is thick, upright, and buſhy; naked toward the lower part, but upwards covered with leaves: its colour is a greyiſh white, and its ſubſtance firm.

The leaves ſtand irregularly; and they are narrow, oblong, and ſomewhat ſinuated at the edges: they are ſoft to the touch, and their colour is a faint green, with a tinge of bluiſh, or greyiſh.

The flowers are large, and of a deep unpleaſing purple: they ſtand in a kind of looſe ſpike at the tops of the ſtalks, and have very ſhort footſtalks: the petals are placed regularly, but they are uſually undulated at the edges.

The ſeed-veſſels are long and large; and the ſeeds are large and roundiſh.

It is common about the coaſts of Italy, and ſometimes is ſeen far from the ſea, both there and in other warmer parts of Europe.

C. Bauhine calls it *Leucoium maritimum anguſtifolium.* Boccone, *Leucoium minus lavendulæ folio obſoleto flore.* The flowers ſometimes are white.

5. Small ſea Stock.

Leucoium purpureum maritimum minus.

The root is long and thick, and is furniſhed with many fibres.

The leaves that riſe firſt from it are in a thick tuft:

tuft: they are long, narrow, of a pale greyiſh green, and ſoft to the touch: they have no foot-ſtalks: they are ſharp-pointed; and they have each one or two indentings at the edge.

The ſtalks riſe in the centre of this tuft, and are round, weak, and divided into many branches: they are ſix or eight inches high, and their colour is a pale green.

The leaves ſtand alternately, and reſemble thoſe from the root: they are long and narrow, and have uſually a ſingle indenting.

The flowers ſtand at the tops, and are ſmall, and of a pleaſing colour, a faint purple.

The ſeed-veſſels are long and knotty, or as it were jointed.

The ſeeds are oval and very ſmall.

It is a native of the Spaniſh ſea-coaſt, and flowers in April.

C. Bauhine calls it *Leucoium maritimum minimum*. Tournefort *Leucoium vernum foliis erucæ*.

GENUS II.

DAMES VIOLET.

HESPERIS.

THE flower is formed of four petals regularly diſpoſed, and terminated by narrow baſes: the cup is compoſed of four narrow-pointed leaves gaping below; two of which are large at the baſe; and it falls with the flower: the ſeed-veſſel is long, ſlender, compreſſed, ſtriated, and often crooked, or twiſted, and ſingly pointed; and the ſeeds are oval and compreſſed.

Linnæus places this among the *tetradynamia ſiliquoſa*; the threads in the flower being ſix, four of which are longer than the others; and the ſeed-veſſel a long pod.

The Engliſh name of this genus being much diſuſed, it will be enough for the ſtudent to know there is ſuch a one, and more convenient to uſe the Latin, *heſperis*.

DIVISION I. BRITISH SPECIES.

1. Wild Heſperis.

Heſperis vulgaris.

The root is compoſed of many thick fibres.

The firſt leaves are very numerous, long, narrow, and of a duſky green: they are ſharp-pointed, ſomewhat indented at the edges, and have ſhort footſtalks.

The ſtalk is ſingle, upright, firm, and no[t] all branched, unleſs when luxuriant in the [g]and then only toward the top.

The leaves are large and oblong: th[e] of a deep duſky green, and are broadeſt [a]the baſe, ſharp-pointed, and dented at the edges: thoſe toward the top of the plant have no footſtalks; and thoſe on the lower part have ſhort ones.

The flowers are large and beautiful: they are of a purpliſh colour, ſometimes very faint, ſometimes deeper, and ſometimes altogether white.

The ſeed-veſſels are ſlender and flatted, and often twiſted; and the ſeeds are oval and ſmall.

It is a native of our northern counties, Cumberland and Weſtmoreland; and flowers in May.

C. Bauhine calls it *Heſperis ſylveſtris inodora*; and moſt deſcribe it under the name of *Heſperis hortenſis*: for there is no ſpecifick difference in the two plants. In our gardens, by the aſſiſtance of culture, the flowers become larger, ſtriped, and doubled. Our gardeners, not very nice or careful about names, call it *rocket*; and in theſe appearances the *Striped rocket*, and *Double rocket*.

2. Jack by the hedge.

Heſperis allium redolens.

The root is long, whitiſh, irregularly contorted, and divided into ſeveral parts.

The firſt leaves are roundiſh, but indented for the ſtalk, and ſlightly nicked at the edges: they riſe in a cluſter, ſix or eight together, and have long, ſlender foorſtalks.

The ſtalk is round, firm, upright, of a yellowiſh green, ſcarce at all branched, and three [f]eet high.

The leaves are broad, ſhort, and heart-faſhioned.

The flowers grow at the tops of the ſtalks, and are much leſs than thoſe of the preceding, and of a lovely milk white.

The ſeed-veſſel is long and ſlender; and the ſeeds are brown.

It is common under hedges, and flowers in May.

Ray calls it *Heſperis allium redolens*. Moſt others, *Alliaria*, from its flavour of garlick in the taſte, and lightly in the ſmell.

Linnæus ſeparates this from the *heſperis* kind, and makes it a ſpecies of *eryſimum*. The difference is not very eſſential; and, as the plant is known by this name, we have preferred keeping it in this place.

The *garden heſperis*, which does not differ from the firſt of theſe wild ones, otherwiſe than by culture, is highly celebrated in Germany as a wound herb.

The *common alliaria*, laſt deſcribed, is eaten by our country people with their bread and butter, and is very wholeſome.

Its juice, taken a ſpoonful at a time, is excellent againſt obſtructions of the viſcera: it works by urine. In ſome places it is a conſtant ingredient in clyſters.

DIVISION II. FOREIGN SPECIES.

1. Hairy Heſperis.

Heſperis caule hirſuto.

The root is compoſed of numerous, thick fibres.

The firſt leaves riſe in a large tuft, and are oblong, broad, and of a duſky colour.

The ſtalks are round, not very firm, hairy, ſometimes full of branches, at others quite ſimple, and a foot and a half high.

The leaves ſtand alternately on theſe; and are large, oblong, and of a duſky green: they are broad at the baſe, and narrower all the way to the point, and ſometimes a little waved at the edges: the lower ones have ſhort footſtalks, the upper none.

The flowers ſtand at the top in conſiderable number; and they are large, but naturally of a dead colour: they vary in this, ſometimes being ſimply reddiſh, ſometimes white, but oftener of a duſky hue, with purple veins.

The ſeed-veſſel is long, and often twiſted: the ſeeds are large.

It is a native of Hungary, and flowers in May.

C Bauhine calls it *Heſperis montana pallida odoratiſſima*. Others, *Heſperis Panonica*, and *Heſperis obſoleto flore*.

The flower has great fragrance in an evening, but none in the day; whence the name.

2. Small heart-leaved Heſperis.

Heſperis humilia foliis cordatis.

The root is long, ſlender, and furniſhed with a few fibres.

The firſt leaves riſe in a thick tuft, without footſtalks: they are ſhort, broad, of a bluiſh green, ſharply ſerrated, and ſharp-pointed.

The ſtalks riſe ſeveral together in the centre of this tuft, and are round, ſlender, of a pale green, and a little branched.

They have ſeveral leaves on the lower part, but are naked thence to the top.

Theſe leaves are broad and ſhort, and ſurround the ſtalk by a wide baſe, ſo that they have a heartlike appearance: they are of the ſame bluiſh green, and are indented in the manner of others.

The flowers ſtand in a little tuft at the top of the ſtalk; and are large, and of a beautiful colour, a purpliſh or bluiſh, ſometimes paler, and ſometimes deeper.

The ſeed-veſſels are large, ſlender, and pointed, and the ſeeds are large.

It is common on the ſea-coaſts of France.

C. Bauhine calls it *Leucoium maritimum latifolium*, and moſt follow him; but it is properly a *heſperis*, the pods having nothing of that ſingularly divided top, that mark thoſe of the others.

Leucoium has been a name given much at random by the old writers to plants of very different genera. The proper characters were not ſo eaſily eſtabliſhed as to obviate this kind of confuſion.

3. Melancholy Heſperis.

Heſperis ſiliquis articulatis.

The root is long, divided, and furniſhed with numerous fibres.

The firſt leaves are long, large, and of a duſky green colour: they lie ſpread upon the ground, and they have ſhort footſtalks, and are deeply and irregularly ſinuated at the edges.

The ſtalk is round, upright, firm, and a foot and half high; but at the top it uſually drops.

The leaves are placed irregularly on it, and are oblong and broad at the baſe: they are dented along the edges, and ſharp at the point.

The flowers are large, and of a deep purple: they ſtand at the tops of the ſtalks, and are fragrant in an evening.

The pods are waved, or as it were jointed; the ſeeds are large.

It is a native of the Eaſt, and flowers in June.

C. Bauhine calls it *Heſperis peregrina ſiliquis articulatis*. Others, *Heſperis Syriaca*.

GENUS VII.

ROCKET.

ERUCA.

THE flower is compoſed of four ſhort petals, with very ſmall baſes: the cup is formed of four little, narrow, coloured leaves, and falls with the flower: the pod is long, of a roundiſh ſhape, and crooked, and is divided into two cells by a membrane, which is ſomewhat longer than the two valves of which the pod is formed.

Linnæus places this among the *tetradynamia ſiliquoſa*; the threads in each flower being ſix, of which four are ſomewhat longer than the other two, and the ſeed-veſſel a regular pod.

He joins this and the *ſiſymbrium* under one common character, taking away the eſtabliſhed and more determinate name *eruca* or *rocket*, and calling moſt of theſe plants ſpecies of *water-creſs*: he places others among the *cabbages*, *braſſicæ*.

This tends to create confuſion; for both kinds have very numerous ſpecies, and the diſtinctions are ſmall. Theſe genera approach very nearly to one another; but they have a difference in the petals, thoſe of *eruca* or *rocket* being ſhort, and thoſe of the *ſiſymbrium* longer.



Common Wall Flower.



Sea Wall Flower.



Square podded Wall Flower.



Common Stock July Flower



Little Stock with dentated Leaves.



Narrow leavd Sea Stock.



Small Sea Stock.



Wild Hesperis.



Jack by the Hedge.



Hairy Hesperis.



Small Heart leavd Hesperis.



Melancholy Hesperis.

DIVISION I. BRITISH SPECIES.

1. Common Wild Rocket.

Eruca ſylveſtris vulgatior.

The root is long and thick, and is furniſhed with many fibres.

The firſt leaves riſe in a large tuft, and are long and beautifully divided: they have ſhort footſtalks: their colour is a pale green, and their diviſion is ſo deep, and into ſuch regular ſegments, that they reſemble pinnated leaves.

The ſtalks are numerous, and of a pale green: they are divided into branches, and uſually lean; eſpecially toward the root.

The leaves ſtand irregularly on them, and are like thoſe which grow immediately from the root, large, long, and deeply divided into ſegments, ſo that they appear pinnated.

The flowers are yellow, and they ſtand in a kind of ſpikes at the tops of the ſtalks.

The pods are long and ſlender, and the ſeeds ſmall and brown.

The whole plant has a diſagreeable ſmell.

It is frequent on old walls, and among rubbiſh in many parts of England. It flowers in July.

C. Bauhine calls it *Eruca major lutea caule aſpero.* Others, *Eruca ſylveſtris.*

2. Little, wild Rocket.

Eruca ſylveſtris minima.

The root is long, ſlender, and furniſhed with many fibres.

The firſt leaves riſe in a tuft, and ſpread themſelves every way upon the ground: they are long, narrow, and deeply divided at the edges into numerous ſegments, ſo that they reſemble the pinnated kind.

The ſtalks are numerous, round, upright, ſlender, very little branched, and eight inches high.

The leaves ſtand irregularly on them, and are long, narrow, and deeply divided, as the others, into the pinnated form, but with ſmaller ſegments.

The flowers are ſmall and yellow: they ſtand in little tufts at the tops of the ſtalks, and are ſucceeded by long, ſlender pods.

The ſeeds are ſmall and brown.

It is found in our northern counties, as alſo in the Iſle of Man. It flowers in June.

C. Bauhine calls it *Eruca ſylveſtris minor lutea burſæ paſtoris folio.* Ray, *Eruca monenſis laciniata lutea.*

3. Water-Rocket.

Eruca aquatica.

The root is long, ſlender, and furniſhed with numerous fibres.

The firſt leaves are long and beautiful; each is compoſed of five or ſix pair of pinnæ or ſmall leaves joined to a middle rib, with an odd one at the end: they are of a yellowiſh green, and of a tender ſubſtance.

The ſtalks are numerous, weak, and branched: they are a foot and a half high, but not very erect.

The leaves are placed irregularly on them, and are of the ſame form with thoſe from the root, the ſeveral pinnæ or ſmaller leaves being jagged alſo in two or three places.

The flowers ſtand at the tops of the ſtalks and branches, and are ſmall and yellow: the pods are ſlender, and but moderately long.

The ſeeds are ſmall and brown.

It is common by rivers, and about the edges of ſhallow ponds. It flowers in July.

C. Bauhine calls it *Eruca ſylveſtris minor lutea flore.* The generality of writers, from its place of growth, not common to the other, *Eruca aquatica.*

4. Common Winter-Creſs.

Eruca glabra flore minore barbarea dicta.

The root is long and thick, and has a few fibres.

The firſt leaves riſe in a tuft, and have a very pretty appearance: they are long, large, and of a very deep, but gloſſy green: they are divided, ſomewhat in the pinnated manner, into two pairs of ſegments, and a large, broad part at the end.

The ſtalk is upright, firm, ſtriated, and two feet high.

The leaves ſtand thick upon it, and are like thoſe from the root in ſhape and colour.

The flowers are ſmall and yellow: they ſtand in a thick tuft at the tops of the ſtalks and branches, and are followed by longiſh, ſlender pods.

The ſeeds are numerous. ſmall, and brown.

It is common every where by hedges, eſpecially where the ground is ſomewhat damp. It flowers in April.

C. Bauhine calls it *Eruca lutea, ſeu barbarea.* Others, *Naſturtium hybernum.*

5. Early Winter-Creſs.

Barbara præcox foliis freqaentius ſinuatis.

The root is long, ſlender, white, and full of fibres.

The firſt leaves are ſmall, and ſtand in a thick little tuft: they are compoſed each, as it were, of three pair of pinnæ, and a great rounded leaf at the end; but the diviſions do not reach to the rib, and they are only parts of an entire leaf thus divided into ſegments.

The ſtalk is round, ſlender, yellow, and a foot high.

The leaves are placed irregularly on it, and are few: they are deeply divided into ſeveral pairs of ſegments, with an odd leaf at the end of each, and are of a yellowiſh colour: their principal difference from thoſe of the common kind, is in the frequency of this diviſion.

The flowers are ſmall and yellow, and the pods are ſmall and ſlender.

It is common on ditch-banks, and flowers in April, a week or fortnight before the common kind.

It might ſeem only a variety of that; but ex-

perience ſhews they riſe diſtinctly from the ſeparate ſeeds.

Ray calls this *Barbarea foliis minoribus et frequentius ſinuatis*. Others, *Barbarea præcox*.

Ray ſeparates theſe three laſt plants from the two firſt, under the title of *eruca ſpuria*; but as the principal diſtinction he gives is in the taſte, there was no occaſion to treat of them diſtinctly: He alſo very properly adds to them the plant called *hedge-muſtard*, though commonly joined to the *eryſimums*, to which it is leſs like in the pod.

6. Hedge-Muſtard.

Eruca ſylveſtris eryſimum vulgare dicta.

The root is long, ſlender, and furniſhed with many fibres.

The firſt leaves are large, numerous, and of a faint, but pale green: they are very deeply divided, in reſemblance of the pinnated form, and are cut and jagged alſo on the edges of the ſegments.

The ſtalk is round, firm, upright, very much branched, of a pale green, very tough, and a foot and half high.

The leaves are placed irregularly on it, and reſemble thoſe from the root, being deeply divided, in reſemblance of the pinnated form, and the ſegments again notched at their edges.

The flowers are ſmall and yellow: they ſtand in little tufts at the tops of the branches, and are but of ſhort duration.

The pods are very ſlender, and ſtick cloſe to the ſtalks.

The ſeeds are ſmall and brown.

It is common on dry banks, and flowers in July.

C. Bauhine calls it *Eryſimum vulgare*. Ray, *Eruca hirſuta ſiliqua cauli appreſſa eryſimum dicta*.

This ſpecies of *rocket* is celebrated againſt diſeaſes of the lungs. The juice is excellent in aſthmas, and a ſyrup made of it in all oppreſſions and ſtuffings up of the breaſt, as alſo againſt inveterate coughs. The other ſpecies are of the nature of the *garden-rocket*, celebrated as a provocative to venery; but their virtues are inferior to thoſe of this cultivated kind.

DIVISION II. FOREIGN SPECIES.

1. Garden-Rocket.

Eruca ſativa.

We have often had occaſion to complain of the improper names given by our Engliſh gardeners to the plants brought into their care for their uſe or beauty. In the preſent plant we have a ſingular inſtance: they know it little, and, when they have any acquaintance with it, 'tis under the name of *racket*. This is only a depraved way of ſpeaking the proper word; but that they uſe as the name of a plant altogether different, as we have ſhewn already. The *common heſperis*, or *dames violet*, is what they call *rocket*.

The true *garden rocket*, here to be deſcribed, is a tall plant, of irregular growth, and no great beauty: it got its place in gardens not as a flower, but uſeful plant.

The root is long, ſlender, hard, and furniſhed with many fibres: the firſt leaves are numerous, long, and irregularly divided in the pinnated manner, with a great, odd ſegment at the end.

The ſtalks are numerous, round, upright, and a yard high.

The leaves on them ſtand irregularly, and reſemble thoſe from the root, but that they are more deeply divided.

The flowers ſtand in a looſe ſpike, at the top of the ſtalks, and are of a faint, yellowiſh hue, ſtreaked with black.

The ſeed-veſſels are long and thick.

It is a native of Italy, and flowers in Auguſt.

C. Bauhine calls it *Eruca latifolia ſativa alba Dioſcoridis*. Others, *Eruca ſativa*, *Eruca hortenſis*, and *Eruca Romana*.

GENUS VIII.

CABBAGE.

BRASSICA.

THE flower is compoſed of four petals, of an oval form, undivided, regularly opening in a croſs-like form, as in the reſt of this claſs, and with ſlender bottoms: the cup is compoſed of four greeniſh leaves, and falls with the flower: the ſeed-veſſel is long, rounded, but depreſſed each way, and is parted into two cells by a membrane, which is longer than its two ſides: the ſeeds are round; and the leaves are large and fleſhy, and of a bluiſh green.

Linnæus places this among the *tetradynamia ſiliquoſa*; the flower having ſix threads, four of which are longer, and two ſhorter, and the ſeed-veſſel being a regular pod.

He confounds together this and the *turnip* under one common name, making the *turnip rape*, and *navew*, ſpecies of *cabbage*: but in this, as other the like inſtances, his attachment to the ſmaller parts of the flower leads him to do violence to nature. The *turnip* and *cabbage*, though they agree in many things, differ in others: the cup of the *turnip* is opener than that of the *cabbage*, and yellow; whereas that of the *cabbage* is green. The leaves alſo differ, and the root in many inſtances in all the whole external face of the plant. This, however he has diſregarded it, ought to be taken notice of in all diſtinctions. The *rape*, *navew*, and *turnip*, are indeed all evidently of the ſame kind, as we ſhall ſhew; but they conſtitute a genus quite diſtinct from the *cabbage*.

DIVISION I. BRITISH SPECIES.

1. Sea-Cabbage.

Braſſica maritima.

The root is long, thick, divided into many parts, and furniſhed with long fibres.

The firſt leaves are large, long, and rounded at the ends, and they quickly fade.

The ſtalk is thick, ſpungy, and of a pale greyiſh colour, rough on the ſurface, and often decorated from the bottom with young ſprouts.

At the height of a foot or two above the ground, burſt out the principal leaves: they are very large, long, thick, broad, divided irregularly into a number of rounded ſegments at the edges, and terminated by a great, round part at the end: they are of a greyiſh or bluiſh green colour, and of a very thick ſubſtance; and, in the wild ſtate, the veins are uſually purple.

The main ſtalk, from the ſame part where the leaves riſe, ſends out many branches: theſe are ſlender, round, greyiſh, and uſually covered with a duſty ſubſtance.

The leaves on theſe are oblong, but leſs divided than the others.

The flowers are conſiderably large, and yellow: the pods are long and thick, and the ſeeds are large, round, and of a deep purpliſh brown.

It [illegible]ment about our ſea-coaſts, and flowers in July. In gardens it grows to a vaſt height and bigneſs.

Moriſon calls it *Braſſica maritima arborea, ſeu procerior ramoſa.* Others only, *Braſſica maritima.*

Linnæus makes it the ſame ſpecies with the *common cabbage*; but this is one of thoſe inſtances in which he has reduced the number at the expence of Nature's diſtinctions.

2. Perfoliate Cabbage.

Braſſica ſylveſtris perfoliata flore albo.

The root is long, ſlender, white, and furniſhed with a few fibres.

The firſt leaves are large, broad, oblong, undivided, and of a bluiſh green.

The ſtalk is round, firm, upright, very much branched, and two feet and a half high.

The leaves ſtand alternately on it, and at conſiderable diſtances: they are broad and oblong, of a ſhape ſomewhat inclining to heart-faſhioned; and they ſurround the ſtalk at the baſe: they are obtuſe at the end, not at all divided at the edges, and of a bluiſh green.

The flowers ſtand at the tops of the branches, and are moderately large and white.

The ſeed-veſſels are very long, and the ſeeds are brown, large, and round.

It is wild in our corn-fields, but not common. It flowers in Auguſt.

C. Bauhine calls it *Braſſica campeſtris perfoliata flore albo*; and moſt others follow him.

DIVISION II. FOREIGN SPECIES.

Garden-Cabbage.

Braſſica ſativa-vulgaris:

We are not to conſider in the deſcription of this plant the *cabbage* in its form for the kitchen, that being no more than a convolution of its leaves over one another; but, conſidering the herb in the ſame light with others, as conſiſting, when perfect, of root, ſtalk, leaves, and flowers, and ſeeds, it is ſo to be deſcribed, as a *cabbage*-plant gone to ſeed.

The root is compoſed of a multitude of crooked fibres, connected to an oblong body.

The main ſtem is round, thick, rough, and of a whitiſh colour: this is of a middle nature between a ſtalk and a root: it is not hard as a ſtalk, but tender as a root, and may be properly enough called a part of the root riſing above the ground.

The leaves ſtand in a cluſter at the top of this, and are very large, and of a bluiſh green: they are rounded at the extremity: they have ſome diviſions toward the baſe when they grow freely, and they are of a very thick and fleſhy ſubſtance.

The ſtalk riſes in the center of theſe, and is round, upright, branched, and four feet high.

The leaves on this are oblong, and blunt at the end, of the ſame fleſhy ſubſtance, and of the ſame pale green with the others.

The flowers are ſmall and yellow, and they ſtand in a kind of ſpikes at the tops of the ſtalks.

The ſeed-veſſels are long, and the ſeeds are large, round, and of a purpliſh brown.

It is a native of Italy, and flowers in July.

In the wild ſtate it is ſmaller, and has more leaves on the flowering ſtalk; but there is no other difference. Thoſe who have ſeen ſpecimens of this can never ſuppoſe, either that it is the ſame with the Engliſh *ſea-cabbage*, or that the latter is the original plant of the *cabbage* kind, for it is plainly this.

Such is the appearance of the plant which affords us the *cabbage* for our tables, when growing freely in gardens, and running up to ſeed its own way; or when wild in the fields of Italy: but from this ſingle plant the induſtry and ſkill of the gardeners in preceding ages have furniſhed us with a vaſt variety of kinds.

The round and oblong *cabbages*, diſtinguiſhed by modern gardeners under various names, are the plaineſt and eaſieſt products.

The *curled cabbage*, and what we call the *jagged* or *ragged cabbage*, proceed from the ſame ſtock. The *red*, the *white*, the *purple*, and the *green cabbages*, are only varieties of the ſame. The *ragged*, *red*, and the *parſley leaved cabbage*, all enumerated by C. Bauhine and others, are luxuriances of nature in the ſame kind; as is alſo the

the *fringed cabbage*: but the greateſt luxuriance of all is the *cauliflower*: this is only a botryoide excreſcence of the ſame plant.

The variations in the leaves, their form, diviſion, and diſpoſition, are not all we have to name in this plant, for the root and ſtalk afford an ample fund for the ſame ſportings of Nature, thruſt out of her common road by art. The *cabbage* with a round root, called the *turnip-rooted cabbage*, differs in nothing but this ſwelling of that particular part from the others: and the *colerape*, which has the ſwelling, not in the root below ground, but in the middle of the ſtalk, as it is called, above, is in the ſame manner only a variety.

Thus the *cabbage* and *ſavoy*, the *brocoli*, the *cauliflower*, and the reſt, are to be conſidered by the botaniſt only as one ſpecies; in the culture of which he will view with pleaſure this ſurpriſing variety of appearances: and, when he enters the ground of a London gardener, and ſees the ſmall muſcovite, the *flat* or the *ſugar-loaf cabbage*, he will refer them all to the ſame common ſtock.

The pleaſant taſte and wholeſome qualities of the *cabbage* have introduced it into our gardens, and recommended it to all that care under which it has made theſe various appearances. Eaten moderately, it is perfectly innocent and wholeſome; but it will ſometimes breed flatulencies.

GENUS IX.

TURNIP.

RAPUM.

THE flower is compoſed of four petals, regularly diſpoſed croſs-ways: the cup is formed of four leaves, which ſpread open, and are of the ſame colour with the flower: the ſeed-veſſel is long, and depreſſed both ways: the ſeeds are large and round: the membrane, which divides the pod, ſtands out in a point at the end.

Linnæus places this among the *tetradynamia ſiliquoſa*; the threads in the flower being ſix, four of which are longer than the other two, and the ſeed-veſſel a regular pod.

He joins, as before obſerved, the *cabbage* and *turnip* under one common genus; but the cup ſhews a ſufficient difference, as well as the whole plant.

DIVISION I. BRITISH SPECIES.

1. Wild Navew.

Rapum napus ſylveſtris dictum.

The root is long, thick, white, and furniſhed with a few fibres.

The firſt leaves are long, and moderately broad: they are of a pale green, and are very deeply divided in an irregular manner on the edges.

The ſtalk is round, firm, upright, of a pale bluiſh green, and three feet high.

The leaves ſtand irregularly on it, and have no footſtalks: they are unlike thoſe at the root, broad at the baſe, where they ſurround or encloſe the ſtalk, and ſmaller to the point; ſometimes a little divided, but more frequently only waved at the edges.

The flowers ſtand at the tops of the ſtalks and branches in a kind of tufts: they are ſmall, and yellow.

The ſeed-veſſel is long, and the ſeeds are large and round.

It is common on the ditch-banks, and flowers in June; at which time it very much reſembles the *turnip* when in flower.

C. Bauhine calls it *Napus ſylveſtris*, and moſt others follow him.

It is cultivated alſo in gardens, and then is called *Napus ſativa*, *Navew gentle*, and *garden-navew*; but though larger in this condition, it is no other way different.

The plant which is cultivated in ſome parts of England under the name of *rape*, and *coleſeed* plant, is this raiſed by culture to ſomething like the figure of the *garden-navew*, the field-culture giving it a middle aſpect between the two. From the ſeed of this plant is made *rape-oil*.

The ſeeds are alſo uſed in ſome of the compound medicines of the ſhops; and much learned nonſenſe has been written to ſhew, whether the original authors of thoſe medicines intended the *wild navew* ſeed, or that of the *garden-navew*. The druggiſts mean time uſe *turnip*-ſeed for both, and do no harm by the exchange: whether they take the *rape ſeed*, *cole-ſeed*, *turnip-ſeed*, or that of *wild navew*, the difference is little in the ſmall proportion they bear to the whole in thoſe ſeveral medicines.

DIVISION II. FOREIGN SPECIES.

1. The common Turnip.

Rapum vulgare.

This plant, though ſo common in our fields, as well as gardens, is not a native of our country.

The root is large, thick, and uſually roundiſh: but in this reſpect it varies greatly, ſometimes being oblong, ſometimes very flat, and at others a perfect globe: from this, and from its colour, which is ſometimes white, ſometimes in part purpliſh, and ſometimes yellow, the gardeners the and farmers

farmers have diſtinguiſhed three or four kinds; but the botaniſt is to know theſe are no more than accidental varieties, or the effects of culture, and that the plant is the ſame in all, there being but one known ſpecies of what is properly called *turnip*.

The leaves are numerous and large: they are long, and conſiderably broad, deeply and irregularly divided at the edges, and of a yellowiſh green colour, and rough to the touch.

The ſtalk is round, firm, upright, and three or four feet high.

The leaves on it are ſmaller, and leſs divided than thoſe at the root, the upper ones being ſimple, and of a heart-faſhioned ſhape, without any diviſion.

The flowers are ſmall and yellow: they ſtand at the tops of the ſtalks many together.

The ſeed-veſſel is long, and the ſeeds are large and round.

It is a native of Spain, and flowers in July.

C. Bauhine calls it *Rapum ſativum rotundum*, and moſt others follow him.

This author, as well as many others, diſtinguiſh the *long-rooted turnip* under the name of a peculiar ſpecies, calling it the *long turnip*, and the *female turnip*; but it is, as we have already obſerved, nothing more than a variety.

The *turnip* is a wholeſome root, uſed more in food than medicine, but not altogether without virtues in that reſpect.

The juice of unripe *turnips*, that is, ſmall green ones, with white wine, has ſometimes cured quartan agues.

The roots, as eaten at table, are celebrated as antiſcorbuticks, if eat frequently, and for a length of time; and externally they are commended by way of poultice, boiled ſoft with bread and milk, againſt ſwellings of the breaſts.

GENUS X.

MUSTARD.

SINAPI.

THE flower is compoſed of four ſhort, roundiſh petals, expanded croſs-ways, with very ſhort, narrow bottoms: the cup is formed of four leaves, and ſpreads wide open; its leaves are narrow, and hollowed, and its opening is in a croſs form, and the whole falls with the flower: the ſeed-veſſel is long and rough, and the membrane that divides it within into two cells ſtands out to a very conſiderable length beyond the end of the pod, and is large and flatted: the ſeeds are numerous and round.

Linnæus places this among the *tetradynamia ſiliquoſa*; four of the ſix threads that are in the flower being longer than the other two, and the ſeed-veſſel being a regular pod.

He diſlikes the termination of the old name, and writes it *ſinapis*.

DIVISION I. BRITISH SPECIES.

1. Common Muſtard.

Sinapi vulgare.

The root is long, ſlender, white, and hung with many fibres.

The leaves that riſe from it are long and large: they are deeply divided at the edges, ſo as ſomewhat to reſemble the pinnated form, and they are terminated each by a broad, large, round piece at the end.

The ſtalk is round, upright, firm, and not much branched; it is two feet and a half high, and is rough toward the bottom, as are alſo the leaves; and ſmooth at the top.

The leaves are placed irregularly on it, and are, like thoſe from the root, long, ſinuated at the edges, of a pale or yellowiſh green, and rough to the touch.

The flowers are ſmall and yellow: they ſtand in a kind of ſpikes at the tops of the ſtalk and branches.

The ſeed-veſſels are oblong, but not ſo long as in moſt of the other plants of this claſs; and they ſtand upright, and near the ſtalk.

The ſeeds are numerous and round.

We cultivate this in fields and gardens for the ſeed; but it is alſo wild in our corn fields, and in waſte places.

This is the plant whoſe ſeeds are the common *muſtard*-ſeed, much uſed in our kitchens, and ſo valuable in medicine.

J. Bauhine calls it *Sinapi ſativum ſiliqua longa glabra ſemine ruſſo ſive vulgare*. Others, *Sinapi vulgare*.

2. White Muſtard.

Sinapi album ſiliqua hirſuta.

The root is long, ſlender, white, and furniſhed with many fibres.

The firſt leaves riſe in a large tuft, and are long, broad, of a yellowiſh green, rough to the touch, and very deeply and irregularly jagged, often down to the rib.

The ſtalk is round, upright, and divided into many branches.

The leaves on this are numerous and large: they are rough, and very deeply jagged, and have long footſtalks.

The flowers are ſmall and yellow: they ſtand in conſiderable numbers at the tops of the branches, and are followed by long, hairy pods.

The roughneſs of theſe ſeed-veſſels is not their only diſtinction from thoſe of the *common muſtard*: they ſtand out from the ſtalk, whereas the others run almoſt parallel with it; and they are as

it were knotty, the ſeeds ſhewing themſelves through them.

The ſeeds are naturally white, whence the plant has its name *white muſtard*; but they ſometimes loſe that colour, and become brown or rediſh: they are very large and round

J. Bauhine, who is happier in his diſtinctions of the *muſtard* kind than Caſpar, calls this *Sinapi album ſiliqua hirſuta ſemine albo vel ruſſo*. C. Bauhine calls it *Sinapi apii folio*; but this is not a good character of the leaf, the diviſion not being ſo frequent or deep as to require ſuch a deſcription.

It is common in waſte places, and is often cultivated in gardens.

The two kinds of *muſtard* agree in their virtues, which are very conſiderable.

The young ſhoots are eaten as ſallet with thoſe of radiſh, and ſome others: theſe make together what the gardeners call *young ſalleting*, or *ſpring ſalleting*; and this way they are very wholeſome.

The ſeeds are of frequent uſe at our tables, and are very wholeſome: but, beſide their uſe with our food in the way of *muſtard*, they are frequently taken whole as a medicine.

This way given, they are excellent againſt rheumatic complaints, and againſt the falling-ſickneſs. They operate by urine, and moderately promote the menſes; and at the ſame time that they have theſe ſeveral good effects, they ſtrengthen the ſtomach, prevent flatulences, and create an appetite.

A table-ſpoonful of the ſeeds unbruiſed may be taken for this purpoſe every morning.

In thoſe pains of the back to which gouty people are ſubject, and which are uſually attended with ſomewhat of the gravel, this is an excellent remedy.

The ſeeds bruiſed, and applied to the ſkin, bring on a redneſs and heat: they are a gentler kind of bliſter, and in this uſe are called *ſinapiſms*. Theſe are good in paralytic caſes, and often in fevers attended with light-headedneſs.

3. Charlock.

Sinapi arvenſe rapiſtrum dictum.

The root is long, ſlender, white, and furniſhed with a few fibres.

The firſt leaves are long, large, and of a dead yellowiſh green: they are deeply divided at the lower part, in ſuch a manner as to bear a rude reſemblance of the pinnated form, and terminated by a large, oblong piece; that and all the other ſegments being ſomewhat pointed at the ends, and ſerrated at the edges.

The ſtalks are numerous, round, branched, and a foot and a half high; but they do not ſtand regularly upright.

The leaves on the lower part of theſe ſtand irregularly, and reſemble thoſe from the root; but thoſe near the tops of the branches are ſimple, ſmall, oblong, and undivided.

The flowers are moderately large and yellow.

The pods are large, long, and full of large ſeeds: they ſtand out from the ſtalks.

The ſeeds are of a deep blackiſh colour.

It is very frequent in cultivated land, to the great injury of the farmer. It flowers in July.

C. Bauhine calls it *Rapiſtrum arvorum flore luteo*, and others follow him.

The firſt appearance of this plant is not unlike that of the turnip, and very unhappy miſtakes have ariſen from this reſemblance. A farmer who has ſent in unſkilful weeders to clear a turnip-field, has had all his turnips pulled up, and all the *charlock* left. The roots at this early period of growth have little difference; but the *charlock* leaves are more pointed at the ends.

There is a white-flowered plant, commonly numbered with the *charlock* among the *muſtard* kind; but it is properly a *raphaniſtrum*, and will be deſcribed in its place in a ſucceeding genus.

DIVISION II. FOREIGN SPECIES.

1. Rocket-leaved Muſtard.

Sinapi erucæ folio.

The root is long, ſlender, and hung with a few fibres.

The firſt leaves are numerous, and very large: they are long, broad, and regularly divided into four or five pairs of ſegments at the edge, ſo that they reſemble pinnated leaves: all theſe ſegments, as well as the terminating one, are long, narrow, and undivided, and the whole leaf is of a faint green.

The ſtalk is round, upright, and divided into many branches: it grows to a foot and half high, and thick ſet with leaves: theſe are large, and in all reſpects reſemble thoſe from the root, each being divided deeply into narrow ſegments.

The flowers are ſmall and yellow: they ſtand at the tops of the ſtalks and branches, and are but of ſhort duration; but they are quickly ſucceeded by others.

The ſeed-veſſels ſtand in a long ſpike, and at a good diſtance from the ſtalk.

The ſeeds are large and brown.

It is common in France and Italy, and flowers in June.

C. Bauhine calls it *Sinapi erucæ folio*, a name very well expreſſing the plant, its leaves much reſembling thoſe of the *wild rocket*. Others, *Sinapi ſylveſtre minus*.

GENUS XI.

RADISH.

RAPHANUS.

THE flower is compoſed of four petals, diſpoſed croſs-ways; theſe are of a heart-faſhioned ſhape, and have very ſlender bottoms, which are a little longer than the cup: the cup is formed of four leaves, which are narrow, oblong, erect, and thick at the baſe; they do not open much, and the whole cup falls with the flower: the ſeed-veſſel is thick, rounded, ſpungy, ſwelled out by the ſeeds in ſeparate parts, ſo that it appears jointed, and is terminated by a long point: the ſeeds are numerous, large, and round.

Linnæus places this among the *tetradynamia ſiliquoſa*, four of the ſix threads in the flower being longer than the other two, and the ſeed-veſſel being a regular pod.

He very raſhly joins under this head the *raphaniſtrum* and *cakile* of authors; they properly belonging to ſeparate genera: we ſhall ſhew the diſtinctions.

DIVISION I. BRITISH SPECIES.

Wild white Radiſh.

Raphanus ſylveſtris radice albente.

The root is long, thick, fleſhy, and perfectly like the *common radiſh* of our gardens, but that it is white: the taſte is like it, but milder, and the ſubſtance only a little harder from its growing in worſe ground; ſometimes it is crooked, or ſplit from ſtones in its paſſage: but when it has free growth, any one would call it a *white radiſh*.

The leaves are large, long, and very deeply divided into a number of pairs of ſegments, reſembling ſo many pinnæ, and a roundiſh piece at the end: they are of a duſky green, and ſomewhat rough to the touch.

The ſtalk is round, upright, ſmooth, divided into many branches, and two feet high.

The leaves on the lower part of it reſemble thoſe from the root; but thoſe higher up are ſimple, oblong, and only jagged at the edges.

The flowers ſtand at the tops of the ſtalks and branches: they are ſmall and yellow.

The ſeed-veſſel is thick jointed, and, while young and tender, is ſpungy, but it afterwards gets almoſt a woody hardneſs, and becomes ſtriated.

The ſeeds are round and brown.

It is found in ſome parts of Suſſex, principally near the ſea-coaſt, and flowers in June.

Ray calls it *Raphanus maritimus flore luteo ſiliquis articulatis ſecundum longitudinem eminenter ſtrialis.*

One would think the *garden-radiſh* raiſed from this, but for the colour of the flower.

DIVISION II. FOREIGN SPECIES.

1. Garden-Radiſh.

Raphanus vulgaris.

This, though ſo commonly cultivated among us, is not a native of our country.

The root is long, ſlender, and fleſhy, of a delicate purple or rediſh colour, mixed with white, and of a ſharp, pleaſing taſte.

The leaves are large, long, and in their diviſion plainly pinnated: each conſiſts of four or five pairs of roundiſh pinnæ, with a larger alſo rounded at the end.

The ſtalk is round, firm, upright, and three feet high: it is divided into ſeveral branches, and has a few leaves placed irregularly on it.

Theſe are compoſed of narrower pinnæ than thoſe from the root, and are of a paler colour.

The flowers are very numerous, and moderately large: they ſtand at the tops of the branches; and are white, with a tinge of purple or red, more in ſome, and leſs in others.

The ſeed-veſſel is thick, fleſhy, or ſpungy, and ſwelled out into a kind of joints.

The ſeeds are large, and of a rediſh or purpliſh colour: one lies in every ſwelling of the pod.

It is a native of Spain, and flowers in June.

C. Bauhine calls it *Raphanus minor oblongus*. Others, *Raphanus ſativus*, and *Raphanus vulgaris*.

2. Round black Radiſh.

Raphanus radice rotundo nigro.

The root is of the ſhape and bigneſs of a ſmall turnip, black on the outſide, white within, and of a fleſhy ſubſtance: it is of a firmer texture than the *common radiſh*, and of a taſte not unlike it, but to many palates more agreeable.

The leaves that riſe from this are long, pinnated, and of a black green: the ſeveral pinnæ are narrower than in the *common radiſh*, and are jagged at the edges, and terminate in a point.

The ſtalk is round, upright, thick, firm, and two feet high.

The leaves on its lower part reſemble thoſe from the root; but thoſe on the upper part are ſmall, ſimple, and only notched at the edges.

The flowers are ſmall and purpliſh, but with ſome white, and they grow at the tops of the ſtalks and branches.

The pods are thick, fleſhy, ſpungy, and jointed.

The ſeeds are large, roundiſh, and dark coloured.

It Is a native of Italy, and flowers in July.

C. Bauhine calls it *Raphanus major orbiculatus ſive rotundus.* Others, *Raphanus rotundus niger.* Linnæus ſuppoſes it only a variety of the *common radiſh*; but this contradicts reaſon.

3. Long, jagged leaved black Radiſh.

Raphanus foliis laciniatis radice longo nigro.

The root is long, thick, and furniſhed with a few fibres: it is black on the outſide, white within, and of a pleaſing taſte: in ſhape it ſomewhat reſembles the common *garden-radiſh*; but it differs altogether in colour, flavour, and ſubſtance: in all theſe reſpects it approaches more to the nature of the round, black radiſh; but in the leaves it differs both from that and the other in the moſt obvious and diſtinct manner; ſo that although confounded by Linnæus with the other as a variety of the *common radiſh*, it is plainly a diſtinct ſpecies.

The leaves are long, large, and deeply jagged: the ſegments are placed irregularly two or three on each ſide, but not in pairs, and the ribs of the leaf between them is jagged: they are alſo nicked at the edges, as is the terminating ſegment, and all of them are ſharp-pointed.

The ſtalk is round, upright, firm, of a pale green, and a yard high.

The leaves on it are few, and placed irregularly; but they reſemble thoſe from the root in form, and are rough to the touch, and of a pale green.

The flowers grow at the tops of the ſtalks and branches, on branched footſtalks: they are large, whitiſh, with a tinge of red, and quickly fall.

The ſeed-veſſel is thick, rounded, ſpungy, and jointed: the ſeeds are large, roundiſh, and brown.

It is a native of Spain, and flowers in June.

C. Bauhine calls it *Raphanus niger.* Others, *Raphanus niger radice pyriformi.*

The qualities of all theſe radiſhes are the ſame, and they are more uſed at table than in medicine.

They work by urine, and are ſaid to be ſweeteners of the blood, and good againſt the ſcurvy; but they will agree with few ſtomachs.

GENUS XII.

BASTARD RADISH.

RAPHANISTRUM.

THE flower is compoſed of four petals, diſpoſed regularly croſs-ways one to another; theſe are broad, and have very ſhort and very ſlender bottoms, a little longer than the cup: the cup is compoſed of four little, oblong leaves, thick at the baſe, and ſtanding cloſe. The ſeed-veſſel is a jointed pod, and, when ripe, it naturally breaks at the joints, and lets out the ſeeds; and it is not ſpungy, as in the radiſh.

Linnæus places this among the *tetradynamia ſiliquoſa*, four of the ſix threads in the flower being longer than the other two, and the ſeed veſſel being a regular pod; but he takes away its eſtabliſhed and diſtinctive name, making it a ſpecies of *radiſh*. From this it differs in the ſingularity of the pods, being jointed, and ſeparating naturally at the joints: the *radiſh*, in the ſame manner, differs from all other genera of this claſs, in the pods being ſpungy. That character it poſſeſſes alone, and is by it diſtinguiſhed from this genus; as this is from all others, by the jointed ſtructure, and naturally ſeparation of the pod.

As we have no proper Engliſh name for this genus, *baſtard radiſh* being a compound and improper one, and ſome of the ſpecies being called by authors otherwiſe improperly, it will be beſt to retain the Latin name *raphiſtrum.*

DIVISION I. BRITISH SPECIES.

1. White-flowered Raphaniſtrum.

Raphaniſtrum flore albo ſiliqua articulata.

The root is long, ſlender, white, and furniſhed with many fibres.

The leaves that riſe from it are large, oblong, and broad, and have long, thick footſtalks: they are compoſed, as it were, of one pair of pinnæ, and a large piece at the end; and their colour is a deep green: they are rough to the touch, and ſomewhat hairy.

The ſtalks are numerous, round, weak, hairy, upright, and very much branched.

The leaves are placed irregularly on them, and reſemble thoſe from the root: they are rough, and of a ſomewhat paler green.

The flowers are large, white, and uſually ſtreaked with red, or a pale purple: they are not unlike ſome of the ſmall ſingle ſtock-julyflowers.

The ſeed-veſſel is long, ſlender, and jointed: it is not hairy, as the reſt of the plant, but perfectly ſmooth; and, when the ſeeds are ripe, it drops to pieces at the joints: the ſeeds are round and brown.

It is common in corn-fields, and flowers in July.

C. Bauhine calls it *Raphaniſtrum flore albo ſiliqua articulata*; a name uſed by moſt others. We call it commonly *White-flowered charlock*, with a jointed pod: but this is very improper, for charlock is a ſpecies of muſtard.

2. Yellow-

Common Wild Rocket

Little Wild Rocket

Winter Cyps

Hedge Mustard

Perfoliate Cabbage

Wild Navew

Common Turnip

Common Mustard

Charlock

Rocket leaved Mustard

Wild white Radish

Long jagged leaved black Radish

Round black Radish

White flowered Raphanydrum

Yellow flowered Raphanydrum

Common Water Cyps

Jagged Water Cyps

2. Yellow-flowered Raphaniſtrum.

Raphaniſtrum flore luteo.

The root is long, ſlender, white, and furniſhed with many fibres.

The firſt leaves are large and oblong: they are broadeſt at the baſe, ſinuated at the edges, and ſharp-pointed; and they are ſupported on ſhort footſtalks: they are rough to the touch, and of a deep green.

The ſtalk is round, upright, firm, two feet and a half high, and divided into many branches.

The leaves on it are numerous: they are placed irregularly, and they reſemble thoſe from the root: they have very ſhort footſtalks, and are deeply and irregularly ſinuated.

The flowers ſtand at the tops of the ſtalks and branches, and they are ſmall and yellow.

The pods are long, and moderately thick: they are jointed, and of a pale green, and, when ripe, they break aſunder at the joints.

The ſeeds are round, large, and brown.

It is common in corn-fields, and flowers in July.

Ray calls it *Rapiſtrum flore luteo ſiliqua glabra articulata.* Our people, *Yellow charlock, with a jointed pod.*

DIVISION II. FOREIGN SPECIES.

Dwarf Raphaniſtrum.

Raphaniſtrum humile foliis diviſis.

The root is a ſmall, white fibre; little more.

The firſt leaves are oblong, narrow, and ſharp-pointed: they are deeply divided at the edges, in the manner of pinnated leaves, but not quite to the rib.

The ſtalks are numerous, ſlender, weak, and not more than five or ſix inches high: they generally trail upon the ground two thirds of their length.

The leaves on them are few, ſo that they appear for the greater part naked: theſe ſtand irregularly, and are like thoſe from the root.

The flowers are ſmall and yellow, and they ſtand in tufts at the tops of the ſtalks.

The ſeed-veſſel is long and jointed, and the ſeeds are ſmall and brown.

It is a native of Siberia, and flowers in June.

Gmelin calls it *Raphanus foliis pinnatis pinnis confluentibus ſiliquis teretibus articulatis.* The whole plant has greatly the aſpect of the *wild rocket* in miniature.

The ſeeds of the *white rapanhiſtrum* are ſaid to operate powerfully by urine; but there is not certain authority for it. The virtues of the others are not known. They are very troubleſome to the farmers as weeds.

GENUS XIII.

WATERCRESS.

SISYMBRIUM.

THE flower is compoſed of four oblong petals, which are diſpoſed croſſwiſe, and have very ſmall bottoms: the cup is formed of four little, narrow leaves: theſe ſpread tolerably open, and are coloured; and the whole falls with the flower: the ſeed-veſſel is crooked and ſhort; and the membrane that divides it within is ſomewhat longer than the two ſides: the ſeeds are numerous and ſmall.

Linnæus places this among the *tetradynamia ſiliquoſa*; four of the ſix threads in the flower being longer than the other two; and the ſeed-veſſel a regular pod: but he very improperly joins with the *watercreſſes* many plants not allied to them: theſe we ſhall give under other regular genera, and in their proper places.

1. Common Watercreſs.

Siſymbrium vulgare.

The root is long and creeping: it runs under the mud, and has tufts of fibres at ſmall diſtances.

The firſt leaves are long and pinnated: each is compoſed of two or three pairs of pinnæ, with a large leaf at the end; and theſe ſeparate pinnæ are ſhort, broad, and have no footſtalks.

The ſtalks are round or flatted, and of a pale green: they are ſtriated, weak, and very much branched: they are pinnated, as thoſe from the root, but the pinnæ are ſomewhat ſmaller.

The flowers are little and white: they ſtand in ſmall tufts, and at the tops of the ſtalks and branches.

The ſeed-veſſels are ſlender, and not very long; and the ſeeds are ſmall, and brown.

It is common in ſhallow waters, and flowers in May.

C. Bauhine calls it *Naſturtium aquaticum ſupinum.* J. Bauhine, *Siſymbrium cardamine ſive Naſturtium aquaticum.*

It is an excellent antiſcorbutick.

The juice of it is given in ſpring with that of brooklime, and ſome other plants of the ſame character; but it has more virtue than them all. This is at beſt an unpleaſant method of taking it: it is very agreeable, eaten as a ſallad; and there is no way in which it better exerts its virtues.

It opens obſtructions, operates by urine, and promotes the menſes. Many medicines of great name, and nauſeous taſte, are inferior to this little plant in ſcorbutick diſorders.

2. Small-leaved Watercreſs.

Siſymbrium foliis minoribus præcocius.

The root is a ſmall tuft of white fibres.

The firſt leaves are ſhort and ſmall: each conſiſts of a ſingle pair of little pinnæ, and a large, round piece for the termination: they are of a fleſhy ſubſtance and a deep green colour, often browniſh.

The ſtalks are numerous, weak, and low: they are not more than five inches in length; and they lie for the moſt part on the ground.

The leaves ſtand irregularly on them, and reſemble thoſe from the root; but that ſometimes they have two pairs of pinnæ, beſide the odd leaf at the end.

The flowers are ſmall and white; and they ſtand in little tufts at the tops of the ſtalks.

The pods are ſlender, and longer than in the common kind; and the ſeeds are numerous, very ſmall, and brown.

It is common about the ſides of brooks, and flowers in April.

Ray calls it *Naſturtium aquaticum foliis minoribus præcocius.*

The ſame author mentions, as another ſpecies, the *Naſturtium aquaticum pinculis paucioribus* of Mr. Doody; but it is the ſame with this. The taſte is ſharper in this ſmall kind than in the other, and it is altogether diſtinct.

3. Jagged-leaved Watercreſs.

Siſymbrium ſerratis foliis.

The root is long, ſlender, and furniſhed with many fibres.

The firſt leaves riſe in a tuft, and they are large and beautiful: they are long, narrow, and pinnated: each is compoſed of four or five pairs of pinnæ, with an odd one at the end; and theſe are ſharply ſerrated at their edges.

The ſtalk is upright, firm, and a foot high: its colour is a pale green, and it is ſtriated, and branched toward the top.

The leaves are numerous, and placed irregularly: they are pinnated, and ſometimes branched: their pinnæ are oblong, ſerrated at the edges, and of a pale green: and both they and the odd leaf at the end are ſharp-pointed.

The flowers are ſmall and white: they ſtand in ſmall tufts at the tops of the ſtalks; and uſually there are long rows of the pods under them when the plant has been any time in flower.

The pods are ſhort and ſmall; and the ſeeds are very ſmall, and brown.

It is not uncommon in Hampſhire, and has been found in many other parts of England.

Mr. Ray, among others, took this at one time for the impatient ladyſmock, to be deſcribed hereafter: but he found the miſtake afterwards.

C. Bauhine calls it *Naſturtium aquaticum erectum folio longiore.* Others, *Italian watercreſs.*

GENUS XIV.

LADYSMOCK.

CARDAMINE.

THE flower is compoſed of four broad, obtuſe petals, with very narrow bottoms regularly diſpoſed, and expanding croſſwiſe: the cup is formed of four little, erect, oblong leaves with obtuſe ends; and it falls with the flower: the ſeed-veſſel is a long, ſlender pod, of a rounded figure, but a little depreſſed, and it is compoſed of two valves, or ſides, which, when ripe, roll back, and diſcharge the ſeeds with violence: the ſeeds are numerous, ſmall, and round.

Linnæus places this among the *tetradynamia ſiliquoſa*; four of the ſix threads in the flower being longer than the two others, and the ſeed-veſſel a regular pod.

DIVISION I. BRITISH SPECIES.

1. Common Ladyſmock.

Cardamine vulgaris.

The root is a tuft of ſlender, white fibres, penetrating deep into the ground.

The firſt leaves are long, and regularly pinnated, in a very beautiful manner: each is compoſed of five or ſix pair of pinnæ, which are ſhort and roundiſh, and an odd one of the ſame ſhape at the end.

They are of a deep green colour, often brown, of a firm ſubſtance.

The ſtalk is round, upright, firm, not much branched, and a foot high.

The leaves on it are pinnated, but very unlike thoſe from the root; for in theſe the pinnæ are all long and narrow: they ſtand irregularly on the ſtalk, and are not numerous.

The flowers grow at the top in a little tuft: they are large and white, ſometimes of a pure and perfect white; but at others, they have a bluſh of purpliſh.

The ſeed-veſſels are long and ſlender; and the ſeeds are little and roundiſh.

It is common in our meadows, and flowers in April.

C. Bauhine calls it *Naſturtium pratenſe magno flore.* Others, *Cardamine* and *Cardamine vulgaris.* The common people in ſome places, *Cuckowflower.*

2. Great-flowered Ladyſmock.

Cardamine flore majore elatior.

The root is long, ſlender, and creeping; and has a number of large fibres irregularly growing from different parts.

The firſt leaves are large, and beautifully pinnated: they conſiſt each of about four pairs of

broad, roundiſh pinnæ, with a larger one at the end; and they are of a firm ſubſtance and deep green: the pinnæ, ſeparately, as well as the whole leaf, are much larger than in the common kind.

The ſtalk riſes in the midſt of theſe, and is round, upright, very little branched, and two feet or more in height.

The leaves on it are numerous, and, like thoſe from the root, each is compoſed of four or five pairs of pinnæ, with an odd one much larger than the reſt at the end.

The flowers grow at the tops of the ſtalks, and of many young ſhoots from the boſoms of the upper leaves: and they are large and white.

The ſeed veſſel is a long, ſlender pod; and the ſeeds are numerous and ſmall.

It is frequent on boggy grounds in many parts of the kingdom; and flowers in May.

Ray calls it *Cardamine flore majore elatior*. C. Bauhine, *Naſturtium aquaticum majus et amarum*. Others, *Naſturtium aquaticum amarum*. Its common Engliſh name is *Bitter watercreſs*; the taſte being bitter and pungent.

3. Impatient Ladyſmock.

Cardamine flore minimo impatiens.

The root is compoſed of many thick fibres, with other ſmaller ones hanging from them in great numbers.

The firſt leaves grow in a tuft, and ſpread themſelves very regularly on the ground: they are long, narrow, and very beautifully pinnated: the pinnæ are ſmall, of an oval figure, ſerrated at the edges, and very beautifully pointed at the end; and there are about five pairs of them on each rib, with an odd one of the ſame ſhape and ſize at the end.

The ſtalk is round, ſlender, upright, of a whitiſh colour, and a foot high.

The leaves ſtand irregularly, and are like thoſe from the root, but longer and narrower.

The flowers ſtand at the tops of the ſtalks, and of branches riſing from the boſoms of the upper leaves; and they are very ſmall and white.

The ſeed-veſſel is long, and very ſlender.

When it is ripe it burſts with violence, not only on the leaſt touch, but on the ſmalleſt motion in the air; and the ſeeds fly out with violence: from this it obtained the name of *impatient ladyſmock*: the ſeeds are round and ſmall.

It is found in Ireland, and on the mountains in the north of England. Thoſe who have miſtaken the ſerrated watercreſs for this plant, have mentioned many other places, but in theſe it really is frequent.

It flowers in May.

C. Bauhine calls it *Syſimbrii cardamine ſpecies quædam inſipida*. The generality of authors, *Cardamine impatiens*.

4. Hairy Impatient Ladyſmock.

Cardamine impatiens altera birſutior.

The root is a cluſter of ſmall, white fibres.

The firſt leaves grow in a tuft, and are regularly pinnated: and they have about three pairs of pinnæ, with an odd one at the end; and theſe are ſmall and irregularly indented: they are of a duſky green, and ſomewhat hairy.

The ſtalks are numerous, weak, and ſcarce upright: they are of a pale green, ſtriated, and very much branched.

The leaves on them reſemble thoſe from the root, and are, in the ſame manner, compoſed of pinnæ irregularly notched at the edges.

The flowers are ſmall and white; and they grow in little tufts at the tops of the ſtalks and branches.

The ſeed-veſſels are long and ſlender; and they burſt with violence on the leaſt touch when ripe: the ſeeds are ſmall, round, and of a pale brown.

It is common in watery places, and flowers in April.

Ray calls it *Cardamine impatiens altera birſutior*. C. Bauhine, *Naſturtium aquaticum minus*.

5. Daiſy-leaved Ladyſmock.

Cardamine pumila bellidis folio.

The root is long, ſlender, and furniſhed with many fibres.

The firſt leaves riſe in a ſmall tuft, and are of a form altogether different from thoſe of the other *ladyſmocks*: they are ſimple, undivided, and not ſo much as notched at the edges: their ſhape is an oblong, tending to oval: they are cluſtered together, and have no footſtalks, and they are of a duſky green, and ſomewhat hairy.

The ſtalk is round, upright, firm, of a pale green, not at all branched, and about three or four inches high.

The leaves ſtand irregularly on this, and have no footſtalks: they are ſhort, and broad at the baſe, from which they gradually decreaſe to a point.

The flowers ſtand in numbers at the top of the ſtalks, and are large and white, perfectly reſembling thoſe of the *common ladyſmock*.

The ſeed-veſſels are long and large; and the ſeeds are numerous, round, ſmall, and brown.

It is common on the mountains in Wales, whence the winds ſeem to have blown ſome of its ſeeds to Briſtol; the plant ſome years being very frequent on St. Vincent's rock.

C. Bauhine calls it *Naſturtium alpinum bellidis folio minus*.

6. Serrated dwarf Ladyſmock.

Cardamine pumila foliis ſeratis.

The root is long and ſlender; and is furniſhed with a few fibres.

The leaves grow very irregularly, but in a thick tuft, from the head of the root: ſome of them are ſingly fixed to pedicles from the root, others grow to a rib: they are oblong and ſerrated, narroweſt at the baſe, and broader to the end, where they terminate in a pointed tip: their colour is a duſky green, and their taſte bitteriſh and watery, but ſomewhat ſharp.

The ſtalk is round, ſlender, uſually naked, and about three inches high.

The flowers ſtand at its top; and they are large and white.

The

The ſeed-veſſels are long and ſlender; and the ſeeds are ſmall and brown.

It is a native of Wales, and flowers in April.

Ray calls it *Naſturtium petræumi*. Johnſton *Johnſton's rockcreſs*; and moſt others have copied the ſame name, in honour of the perſon who firſt obſerved the plant.

There has not been much written of the virtues of the *cardamine* kind, nor are they regarded in the preſent practice. The country people in the north bruiſe the whole plant of the common kind in ſpring, and take the juice, a wine glaſs at a time, againſt the ſcurvy, in the jaundice, and in all obſtructions. It operates powerfully by urine; and they record many conſiderable cures performed by it.

DIVISION II. FOREIGN SPECIES.

1. Round-leaved trifoliate Ladyſmock.

Cardamine trifolia.

The root is compoſed of numerous ſmall fibres, with ſome few thicker and longer among them.

The firſt leaves riſe in a cluſter, and they are very beautifully diſpoſed: three grow on each footſtalk, in the manner of the leaves of trefoils, and theſe are ſhort, broad, and of a figure irregularly approaching to oval, or rounded: they are of a deep green at firſt, and when they have ſtood ſome time they become purpliſh: their taſte is diſagreeable, and acrid after they have been ſome time in the mouth.

The ſtalks are round, weak, of a purpliſh colour, and ſix or eight inches high.

They have no leaves, except near the bottom, where there ſtand three upon a footſtalk, as in thoſe from the root, which they in all other reſpects alſo perfectly reſemble.

The flowers ſtand at the tops of the ſtalks in a tuft, and are large and white.

The ſeed-veſſel is long and ſlender; and the ſeeds are ſmall and brown.

It is frequent in many of the northern parts of Europe among rocks; and flowers in May.

C. Bauhine calls it *Naſturtium alpinum triſolium*. Cluſius and others, *Cardamine alpina trifolia*.

2. Trifoliate Ladyſmock with pointed leaves.

Cardamine trifoliata foliis acuminatis.

The root is compoſed of a multitude of fibres.

The firſt leaves riſe in a thick tuft, and ſtand on long, ſlender, weak, purpliſh footſtalks, three on each: they are broad at the baſe, ſerrated at the edges, and they terminate in a ſharp point, which, from the middle leaf of the three, is uſually longer than on the others.

The ſtalks riſe among theſe, and are round, purpliſh toward the bottom, and very much branched.

The leaves ſtand alternately on them, and perfectly reſemble thoſe from the root, three broad, ſerrated, and pointed ones ſtanding on every footſtalk.

The flowers are ſmall and white: they ſtand in a kind of ſpikes at the tops of the ſtalks and branches.

The pods are long and ſlender, and the ſeeds are round and purpliſh.

It is a native of Africa, and flowers in June.

Herman calls it *Naſturtium Africanum floribus albis ſpicatis foliis ternatis Chriſtophoriane facie.*

3. Irregular-leaved Ladyſmock.

Cardamine foliis ternatis et pinnatis.

The root is long, ſlender, and white.

The firſt leaves riſe in a ſmall tuft, and have long footſtalks: they uſually ſtand three on each ſtalk; but the diviſion is not ſo perfect and abſolute as in the preceding ſpecies: theſe rather ſeem three parts of an entire leaf, whereas in thoſe the three are abſolutely diſtinct leaves.

The ſtalk riſes in the midſt of this tuft, and is weak, ſlender, branched, and eight or ten inches high.

The leaves ſtand irregularly on it, and are of an irregular form; ſome toward the lower part are trifoliate, or have a ternate diviſion as thoſe at the root; and others have two pairs of pinnated ſegments, and an odd one at the end; but theſe, as the diviſions of the others, are not cut to the rib; there runs an edge from one to the other.

The flowers ſtand at the tops of the ſtalk and branches, and are ſmall and white.

The ſeed-veſſels are long and ſlender, and the ſeeds are ſmall and round.

It is a native of the Pyrenæan mountains, and flowers in June.

C. Bauhine calls it *Naſturtium Alpinum minus reſedæ folio*; and others in general copy that name.

4. Flat-podded Ladyſmock.

Cardamine foliis pinnatis ſiliquis compreſſis.

The root is a long, ſlender fibre, with a few little threads.

The firſt leaves are of an extremely beautiful form and diſpoſition: they lie flat upon the ground, and are very numerous; ſo that they form a cloſe circle: they are long, and very narrow: and they are divided with great regularity in the pinnated manner: the pinnæ are twelve or more on each, with an odd one at the end: they are narrow, and each has a ſingle denticulation, and no more, on each ſide, and this is near the baſe.

The ſtalk is round, ſlender, weak, and ſcarce at all branched: it is eight inches high, and of a pale green.

There are only two or three leaves on it; and theſe reſemble thoſe from the root, but that they are ſhorter and broader in the whole, the diviſions or pinnæ being fewer in number, and longer.

The flowers ſtand in a little tuft at the top of the ſtalk, and are ſmall and white.

The ſeed-veſſels are large, and very ſlender; and the ſeeds are ſmall and brown.

It is a native of Virginia, and flowers in May.

The whole plant has ſome ſome general reſemblance of *ſhepherds purſe*, but that it is ſmaller, and in all parts more delicate.

Gronovius calls it *Alyſſum foliis radicalibus pinnatis in orbem poſitis caulinis lanceolatis ſiliquis compreſſis*. We, *Virginian Ladyſmock*.

GENUS XV.

TOWER MUSTARD.

TURRITIS.

THE flower is compoſed of four petals regularly diſpoſed croſs-ways; theſe are of an oval, but ſomewhat oblong figure, obtuſe, and undivided; and they ſtand erect, as do alſo their ſmall bottoms: the cup is formed of four little, erect, oblong leaves, and falls with the flower: the ſeed-veſſel is very long, ſlender, and of a ſquared ſhape, but two of the ridges are very faint: the ſeeds are numerous and ſmall.

Linnæus places this among the *tetradynamia ſiliquoſa*, the flower having ſix threads, of which four are longer than the other two, and the ſeed-veſſel being a regular pod.

As we have no ſingle word in Engliſh for the name of this genus, it will be proper to uſe the Latin name *turritis*.

DIVISION I. BRITISH SPECIES.

1. Common Turritis.

Turritis vulgaris.

The root is a cluſter of ſmall fibres: the firſt leaves are numerous, and they form a thick and large tuft: they are oblong, conſiderably broad, pointed at the ends, not at all divided at the edges, and they have no footſtalks: their colour is a pale green, and they are rough on the ſurface.

In the centre of this tuft riſe the ſtalks, which are uſually numerous: they are round, upright, not at all branched, and a foot and half high.

The leaves on theſe differ altogether from thoſe which riſe from the root: they are of a heart-faſhioned ſhape; but they run out into a long point; and they are of a bluiſh green colour, and perfectly ſmooth.

The flowers and ſeed-veſſels, when the plant has been ſome little time in flower, ſtand at the top of the ſtalk in a long ſpike, reſembling a tower, or other tall, upright building, whence the plant has its name: the flowers are ſmall and white.

The pods are very long and ſlender, and they ſtand parallel to the ſtalk, and at no great diſtance from it.

The ſeeds are ſmall, very numerous, and round.

It is common in our northern countries, and flowers in June.

C. Bauhine calls it *Braſſica ſylveſtris foliis integris & hiſpedis*. Others, *Turritis vulgatior*.

2. Jagged-leaved Turritis.

Turritis foliis ſerratis.

The root is long, ſlender, and furniſhed with many fibres.

The firſt leaves riſe in a thick tuft, and have no footſtalks: they are oblong, broadeſt in the middle, ſerrated at the edges, and ſharp-pointed: their colour is a pale greeniſh, and they are hairy.

The ſtalks are numerous, upright, not much branched, and about ten inches high.

The leaves on theſe are few, and ſtand irregularly: they are of an oblong, and ſomewhat oval figure, and are ſerrated at the edges, and pointed at the end.

The flowers ſtand at the tops of the ſtalks, and are ſmall and white.

The ſeed-veſſels are ſlender and long, and the ſeeds are very ſmall and brown.

It is found on walls, and on dry ditch banks in many places, and flowers in May.

C. Bauhine calls it *Eryſimo ſimilis hirſuta non lacinata alba*; but this, though copied by ſome, is an ill choſen, as well as aukward name; the plant is much more like the *common turritis*.

3. Oval-leaved Turritis.

Turritis foliis ovatis.

The root is ſmall and thready.

The firſt leaves are diſpoſed irregularly in a little tuft: they are ſupported on ſhort, ſlender footſtalks, and are of an oval form, obtuſe at the end, very ſlightly ſerrated at the edges, and ſomewhat hairy: their colour is a faint green, and they are of a tender ſubſtance.

The ſtalks riſe in the centre of this tuft four or five together: they are very ſlender, upright, and of a whitiſh green.

The leaves ſtand irregularly on them, and are numerous: they are alſo of an oval figure, but they have no footſtalks; and they are of a pale gloſſy green colour, and not at all hairy.

The flowers ſtand at the top of the ſtock in a little tuft, and they are ſmall and white.

The ſeed-veſſels are long and ſlender, and they ſtand out from the ſtalk: when the plant has been a little while in flower, there is a kind of ſpike of theſe, a third part of its length.

The ſeeds are ſmall and yellowiſh.

We have it on ant-hills, in dry paſtures, and on ditch banks in ſome places. It flowers in April.

Petiver calls it *Turritis minor foliioſa*, Ray,

Braſſica ſpuria caule magis folioſo birſutior. Others, *Peloſellæ ſiliquoſæ altera ſpecies.*

4. Branched Turritis.

Turritis ramoſa foliis imis hiſpidis.

The root is ſmall, ſlender, white, and furniſhed with a few fibres.

The firſt leaves are oblong, and conſiderably broad: they are of a greyiſh green, and ſomewhat hairy, and rough to the touch: theſe lie ſpread upon the ground in a circular manner.

The ſtalks are numerous, ſlender, weak, and branched.

The leaves on theſe ſtand irregularly, and are but few: they have no footſtalks; they are of the ſame greyiſh green with thoſe from the root, but they are not hairy.

The flowers are ſmall and white.

The ſeed-veſſels are long and ſlender: they uſually are ſeen in a looſe ſpike, under a little tuft of flowers, and are full of ſmall, brown ſeeds.

It is common on walls and dry banks, and flowers in April.

Ray calls it *Braſſica ſpuria minima foliis hirſutis et glabris.* Others, *Piloſella ſiliquoſa thalii.* The common people, *Codded mouſear.*

DIVISION I. BRITISH SPECIES.

Great, various-leaved Turritis.

Turritis major foliis variis.

The root is long, thick, and white, and is furniſhed with many fibres.

The firſt leaves are very long: they lie in a circular tuft upon the ground, and ſome of them are irregularly cut, and undulated at the edges, others altogether undivided: they are all rough to the touch, and of a duſky green.

The ſtalks are numerous, round, thick, upright, very little branched, and two feet high.

The leaves on theſe are numerous, irregularly placed, and altogether different from thoſe about the root: they are of a form approaching to triangular, broad at the baſe, where they ſurround the ſtalk, and ſmaller all the way to the point; and they are of a bluiſh green colour, and of a ſmooth and gloſſy ſurface.

The flowers ſtand in tufts at the tops of the ſtalks, and are white, with a tinge of yellowiſh, ſometimes more, ſometimes leſs.

The ſeed-veſſels are long and ſlender, and the ſeeds are ſmall and brown.

It is a native of Germany, and many other parts of Europe, and flowers in July.

C. Bauhine calls it *Braſſica ſylveſtris foliis circa radicem chicoraceis.* Others, *Turritis major.*

The ſeeds of the *turritis* are accounted excellent in the rheumatiſm; and in ſome places are a common family-medicine for that purpoſe: but they are not known in the ſhops.

GENUS XVI.

HEDGE MUSTARD.

ERYSIMUM.

THE flower is compoſed of four petals, regularly diſpoſed croſs-ways; theſe are oblong, blunt at the end, and have narrow, ſmall bottoms, which ſtand erect, and are of the length of the cup: the cup is formed of four little, oblong leaves, which are coloured, and converge at their points, and the whole falls with the flower: the ſeed-veſſel is very long, and very ſlender, and the ſeeds are ſmall and round.

Linnæus places this among the *tetradynamia ſiliquoſa*, four of the ſix threads in the flower being longer than the other two, and the ſeed-veſſel being a regular pod.

This author introduces into this genus ſome plants properly belonging to the others of the ſame claſs: but a trip of this kind is the more pardonable, becauſe there is no claſs in which the genera are ſo very lightly diſtinguiſhed one from another.

As there is no ſingle word to denote this genus in the Engliſh language, it will be adviſable to uſe the Latin name *Eryſimum*; the more, as the plant commonly known under the name of *hedge muſtard* in the ſhops, properly belongs, as Mr. Ray firſt obſerved, to another genus. This has been already deſcribed and figured in its place.

DIVISION I. BRITISH SPECIES.

1. Treacle Wormſeed.

Eryſimum anguſtifolium camelina dictum.

The root is long, white, woody, and furniſhed with many fibres.

The ſtalks are round, firm, upright, and of a pale green, or purpliſh: they are about two feet and a half high, and not much branched.

The leaves are long and narrow: they ſtand in great number upon the ſtalks, and in an irregular manner. They have no footſtalks; they are narrow at the baſe, and broadeſt about the middle: their colour is a pale green, and they have a bitter taſte, as has alſo the pith within the ſtalk.

The flowers grow in ſmall tufts at the tops of the ſtalks, and they are ſmall and yellow.

The

The ſeed-veſſels are long, ſlender, and ſquared; they ſtand in a kind of ſpikes along the upper part of the ſtalk, when the plant has been ſometime in flower.

The ſeeds are numerous, ſmall, oblong, and yellow, and are very bitter.

It is frequent in the fen countries, as the Iſle of Ely, and flowers in July.

C. Bauhine calls it *Myagrum ſiliqua longa*. Others, *Camelina*.

The ſeeds of this plant are accounted excellent againſt worms, and are much uſed by the country-people; but they are not known in the ſhops.

They are alſo given againſt obſtructions of the viſcera, and in the rheumatiſm and jaundice, with ſucceſs: they operate moderately by urine. This medicine deſerves to be more known.

2. Broad-leaved ſmooth Eryſimum.

Eryſimum latifolium glabrum.

The root is long, white, ſlender, and furniſhed with many fibres.

The firſt leaves are numerous, large, and very deeply divided: they are placed on ſlender footſtalks, and are deeply cut, almoſt to the rib, into a number of ſegments, in ſomewhat like a pinnated form.

The ſtalk is round, thick, upright, not much branched, and a foot and half high,

The leaves on it reſemble thoſe from the root, being divided very deep at the ſides into four or five pairs of ſegments: they are perfectly ſmooth, and of a yellowiſh green.

The flowers are ſmall and yellow: they ſtand in tufts at the tops of the ſtalks, and are but of ſhort continuance.

The ſeed-veſſels are long and ſlender, and they ſtand at a good diſtance from the ſtalk: the ſeeds are ſmall brown.

It is common in waſte places, and flowers in June.

C. Bauhine calls it *Eryſimum latifolium majus glabrum*. Others, *Eryſimum latifolium Neapolitanum*. This name comes from Parkinſon, and is ill adapted to ſo common an Engliſh plant.

3. Flixweed.

Eryſimum foliis tenuiſſime diviſis ſophia dictum.

The root is long, ſlender, and furniſhed with many fibres.

The firſt leaves are large, and very beautifully formed: they are pinnated, and the pinnæ or diviſions are divided, and ſometimes ſubdivided again; ſo that the leaf is compoſed of innumerable very fine and delicate parts.

The ſtalk is round, firm, upright, of a pale green, and a yard high.

It is very much branched, and thick ſet in all parts with leaves.

Theſe ſtand irregularly, and reſemble thoſe from the root: they are very finely divided, and of a deep, but not unpleaſing green.

The flowers are ſmall and yellow, and they ſtand in little tufts at the tops of all the branches.

The ſeed-veſſels are very ſlender, long, and green: the ſeeds are numerous, and extremely ſmall.

It is common in waſte places, and flowers in July.

C. Bauhine calls it *Naſturtium ſylveſtre tenuiſſime diviſum*. Others, *Sophia chirurgorum*. The common people, *Flixweed*, a corrupt way of ſpeaking *Fluxweed*,

This name has been given it for its virtues, which ought to make it more regarded.

The ſeeds are aſtringent, and the juice more ſo: either of theſe, or a decoction of the plant, ſtop fluxes and hæmorrhages in a very ſafe and happy manner.

DIVISION II. FOREIGN SPECIES.

1. Arabian Muſtard.

Eryſimum draba lutea dictum.

The root is long, thick, white, and furniſhed with many fibres.

The firſt leaves riſe in a ſmall tuft, and are ſupported on long footſtalks: they are oblong, and conſiderably broad, indented at the edges, and ſharp-pointed.

The ſtalk is round, upright, firm, and not much branched: its uſual height is two feet, but it ſometimes riſes to twice that, or more.

The leaves ſtand irregularly on it, and are like thoſe from the root: they have ſhort footſtalks, and are oblong, ſerrated, ſharp-pointed, and of a duſky green.

The flowers ſtand at the tops of the ſtalks in a kind of ſpikes, and they are of more duration than moſt of the others: they are ſucceeded by long and very ſlender pods, in which are longiſh yellow ſeeds.

It is a native of Italy, and flowers in July.

C. Bauhine calls it *Draba lutea ſiliquis ſtrictiſſimis*.

The whole plant has a fiery taſte, but the root moſt of all.

It is an excellent medicine in rheumatic complaints, and in obſtructions of the viſcera.

2. Great-flowered Eryſimum.

Eryſimum flore aureo magno.

The root is long, thick, and furniſhed with many fibres.

The firſt leaves are numerous, long, large, and very beautifully divided: they ſpread themſelves upon the ground in a circular manner, and they are ſinuated very deeply in the pinnated form; each leaf is formed of five or ſix pairs of theſe ſegments, united by a rim of a leaf joining the rib; and they are of an irregularly-triangular figure.

The ſtalk is upright, firm, round, not much branched, and two feet high.

The leaves on it are long, narrow, and like thoſe of the root, but with fewer diviſions.

The flowers are large, and of a fine yellow.

The pods are long and ſlender, and the ſeeds ſmall, numerous, and round.

It is a native of Italy, and flowers in June.

C. Bauhine calls it *Eruca latifolia.*

All theſe plants agree in their general qualities as well as external form. They are good in obſtructions of the viſcera, and in ſcorbutic diſorders; but they have not been ſufficiently regarded in the practice of phyſic.

SERIES II.

FOREIGN GENERA.

Thoſe of which there is no ſpecies naturally wild in this country.

GENUS I.

TOOTHWORT.

DENTARIA.

THE flower is compoſed of four petals, regularly diſpoſed croſs-ways: they are broad at the ends, and have ſmall bottoms of the length of the cup. The cup is formed of four little leaves; they are oval, blunt, and converge at the points, and the whole falls with the flower: the ſeed-veſſel is long, and of a rounded form, and contains two cells; the dividing membrane is a little longer than the ſides of the pod: the ſeeds are numerous and oval.

Linnæus places this among the *tetradynamia ſiliquoſa*; four of the ſix threads in the flower being longer than the other two, and the ſeed-veſſel being a regular pod.

Some of the plants of this genus produce a kind of *ſoboles*, or fruitful lumps, in the boſoms of the leaves; but this is not univerſal.

1. Trifoliate Toothwort.

Dentaria triphyllos.

The root is thick, of an irregular figure, and lies obliquely under the ſurface. When young it is white, but when older it is black on the outſide; ſo that the common appearance is its being white in ſome parts, and black in others: it is compoſed in an irregular manner of ſeveral diſtinct parts oddly connected together.

From the different parts of this root riſe ſeveral footſtalks, on each of which are placed three leaves: theſe are broad, ſhort, and of a deep green, ſerrated at the edges, pointed at the ends, and each has its ſeparate pedicle, by which it is fixed to the common footſtalk.

In other parts of the root lie the rudiments of the ſtalk, which therefore riſe in ſeparate places.

Theſe are round, ſlender, of a pale green, and about a foot high.

Toward the middle of the ſtalk, or ſomewhat nearer the top, there ſtand three footſtalks, each ſuſtaining three leaves: theſe are long, narrow, ſharp-pointed, and ſerrated at the edges.

The flowers are moderately large: they have long and ſlender pedicles, ſo that they commonly hang drooping; and their colour is a greeniſh white.

The ſeed-veſſels are long and ſlender, and the ſeeds are numerous and ſmall.

It is a native of Italy, and other warmer parts of Europe, and flowers in July.

C. Bauhine calls it *Dentaria triphyllos.* Columna, *Ceratia Plinii.* Others in general, *Dentaria trifoliata, Three-leaved toothwort.*

2. Seven-leaved Toothwort.

Dentaria heptaphylla.

The root is placed obliquely in the ground, and is compoſed of a number of odd-ſhaped irregular parts, fixed in a rude manner to one another.

The firſt leaves are large, and very beautiful: they ſtand on long, ſlender footſtalks, of a greeniſh white, or of a rediſh colour; and are of a pinnated form, each conſiſting of three pairs of pinnæ, with an odd leaf at the end.

Theſe are oblong, narrow, ſharp-pointed, and ſerrated at the edges.

The ſtalk is round, ſlender, upright, weak, and a foot high.

The leaves grow irregularly on theſe, and in an uncertain form: the lower part of the ſtalk is naked, and that uſually half way up: at this height begin the leaves, three or four of which ſtand at ſome ſmall diſtances over one another; and are of the pinnated form, like thoſe from the root, but having fewer pinnæ: above theſe ſtand ſeveral ſimple, oblong, and narrow leaves, and at the top the flowers in a ſmall ſpike.

Theſe are large, and of a beautiful pale rediſh hue.

The ſeed-veſſel is long and ſlender, and the ſeeds are numerous and round.

In this ſpecies there are frequently little tubercles at the boſoms of the leaves, like thoſe of the bulbiferous ſaxifrage, which falling take root, and become new plants.

It is common in all the ſouthern parts of Europe in ſhady ſituations at the foot of hills. It has been found in ſome places in England

Common Lady Smock

Great flowerd Lady Smock

Impatient Lady Smock

Scented Dwarf Lady Smock

Daisy leavd Lady Smock

Round leavd trifoliate Lady Smock

Trifoliate Lady Smock with pointed Leaves

Common Turritis

Flat podded Lady Smock

Irregular leavd Lady Smock

Jagged leavd Turritis

Great narrow leavd Turritis

Oval leavd Turritis

Wartweed.

American Mustard

Great Flowerd Erysimum.

Beaded Worm Seed.

Broad leavd Smooth Erysimum

thriving very well among buſhes, but it is not a native. The dead ſtalks have been thrown out of ſome adjacent garden, and the tubercles from the leaves have furniſhed theſe plants.

C. Bauhine calls it *Dentaria heptaphyllos baccifera*, *Berry-bearing ſeven leaved toothwort*. He gives the name of *berries* to thoſe tubercles juſt named; but they are not properly ſuch. A berry is a regular fruit ſucceeding a flower: theſe are a kind of ſuckers; no flower has ſtood in the place.

3. Five-leaved Toothwort.
Dentaria pentaphyllæa.

The root is long, thick, of an irregular form, and lies obliquely at a ſmall depth under the ſurface: the firſt leaves are ſupported on long, ſlender footſtalks: they are placed five on each; and they are not diſpoſed in the pinnated manner, but ſpread out like fingers. They are oblong, narrow, ſharp-pointed, ſerrated at the edges, and of a ſtrong and pleaſant green.

The ſtalk is ſlender, upright, green or rediſh, and a foot high.

The leaves ſtand irregularly, and are perfectly like thoſe from the root, five placed on each footſtalk, narrow, long, and ſerrated.

The flowers are large, and of a beautiful pale purple; in ſhape and colour they very much reſemble thoſe of the common heſperis, which our gardeners call ſingle rocket.

The ſeed-veſſel is long and ſlender, and the ſeeds are numerous, ſmall, and round.

It is a native of Italy, and flowers in Auguſt.

C. Bauhine calls it *Dentaria pentaphyllos*, and moſt others copy that name. When this grows in looſe ground very much ſhaded, the root becomes more ſcaly, and the leaves are of a paler green, and are ſoft to the touch. In this ſtate it has been deſcribed by Cluſius under the name of *Dentaria pentaphyllos altera*, as if a diſtinct ſpecies; but theſe errors the ſtudent muſt carefully avoid.

4. Sing'e-leaved Toothwort.
Dentaria foliis ſimplicibus.

The root is thick, and of an irregular figure, and runs obliquely under the ſurface.

The firſt leaves are oblong, narrow, undivided, and of a pale green: they have ſhort footſtalks, and riſe in little tufts.

The ſtalk is round, ſlender, upright, and of a pale green: it is not at all branched, and is a foot and a half high.

The leaves are placed alternately on it from the bottom to the top, and they reſemble thoſe from the root: they have ſhort footſtalks; and they are long, narrow, ſharp-pointed, a little undulated at the edges, and of a pale green.

The flowers ſtand in a ſhort ſpike at the top of the ſtalk; and as the top uſually droops, they commonly hang all on one ſide: they are large and white, with a fainter or deper bluſh of purple.

The ſeed-veſſel is long and ſlender, and the ſeeds are large and round.

It is common in the Harts foreſt in Germany, and flowers in Auguſt.

C. Bauhine calls it *Dentaria baccifera foliis ptarmicæ.*

There are frequently tubercles like thoſe of the ſeven-leaved kind in the boſoms of the leaves of this ſpecies; and when they are numerous, and ſwell kindly, the flower often falls without any ſucceeding ſeed-veſſel, Nature contenting herſelf with this method of encreaſing and continuing the ſpecies.

The *ſeven-leaved toothwort* is accounted a good vulnerary; but this ſeems an opinion not well founded. The taſte is acrid, and almoſt cauſtic. Probably a confuſion of names between this plant, and the *coral toothwort* has occaſioned the opinion.

Linnæus accounts the *ſingle-leaved toothwort* to be only a variety of the ſeven-leaved kind, ſome of the leaves toward the top of which are often ſingle: but the lateſt obſervations ſhew the leaves of this are ſingle from the root; ſo that it is altogether a diſtinct ſpecies. And indeed the whole aſpect of the plant ſpeaks it. There has been alſo much confuſion about the bulbiferous kind, ſome deſcribing one ſpecies, and others another for it; but this is owing to the uncertainty of the bulbs or tubercles appearing, for they are not conſtant in all the plants.

GENUS II.

ARABIS.

THE flower is compoſed of four petals, regularly diſpoſed croſs-ways: they are of an oval, obtuſe form, and have ſmall bottoms of the length of the cup. The cup is compoſed of four little leaves; two of theſe are very narrow, and ſtand erect; the other two are broader, and thick at the baſe, and of an oval ſhape, but ſharp-pointed and hollow. The ſeed-veſſel is very long, flatted, and ſwelling where the ſeeds lie: theſe are numerous, and of a rounded form, but ſomewhat flatted.

Linnæus places this among the *tetradynamia ſiliquoſo*; the threads in the flower being ſix, of which four are longer than the other two, and the ſeed-veſſel being a regular pod. But he introduces among the plants rightly belonging to it ſome that more properly claim their place in other genera. We have endeavoured here to place them as Nature directs.

1. Broad leaved Arabis.

Arabis latiore folio.

The root is long, ſlender, and creeping.

The ſtalks are numerous, round, upright, hairy, and a foot high: they are of a pale colour, and not much branched.

The leaves are numerous, and are placed irregularly: they are of a ſhape approaching to oval, broadeſt at the baſe, where they ſurround the ſtalk, and narrower to the extremity, where they terminate in a ſharp point: they are ſoft to the touch, of a pale green, and ſerrated at the edges.

The flowers ſtand at the tops of the branches in little tufts, and they are ſmall and white.

The ſeed-veſſels are long and ſlender: the ſeeds are large and brown.

It is a native of Germany, and other parts of Europe, and thrives beſt on ſhaded hills. It aſſumes various ſhapes, according to the favourable qualities of the ſoil and ſhelter, ſometimes lying for the moſt part on the ground, and ſometimes riſing perfectly erect. This, and its other variations from the ſame cauſe, have led ſome to figure and deſcribe it two or three times over under various names adapted to the condition of its growth.

6. Long-leaved Arabis.

Arabis longiore folio.

The root is long, ſlender, white, and furniſhed with numerous fibres.

The firſt leaves riſe in a thick tuft, and are ſupported on ſhort footſtalks: they are long, moderately broad, ſharp-pointed, narroweſt at the baſe, and very irregularly indented about the edges.

The ſtalk is round, upright, firm, and not much branched.

The leaves on it in all reſpects reſemble thoſe from the root, but that they are ſmaller: they ſtand irregularly: they are of a pale green, and they have ſhort footſtalks.

The flowers ſtand at the top in a ſmall tuft, and are large, and of a bright yellow.

The ſeed-veſſels are long, flatted, and full of roundiſh ſeeds.

It is a native of many parts of North America, and flowers in July.

Plukenet calls it *Eruca bellidis majoris folio.*

GENUS III.

WOAD.

ISATIS.

THE flower is compoſed of four petals opening regularly croſs-ways; they are oblong, oval, obtuſe, and have very narrow bottoms: the cup is compoſed of four little oval leaves, which ſpread open; it is coloured, and falls entire with the flower: the ſeed-veſſel is oblong, blunt at the end, compreſſed, and two-edged, and is compoſed of two hollow ſides: the ſeed is ſingle, and of an oval figure, and lies in the centre of the pod.

From the ſhortneſs of the pod in this genus ſome might be for referring it to the ſiliculoſe plants; but that is not their eſſential character, as we ſhall ſhew hereafter. This is properly and truly of the ſiliquoſe kind.

Linnæus places it among the *tetradynamia ſiliquoſa*, four of the ſix threads in the flower being longer than the other two, and the ſeed-veſſel, as we have obſerved, notwithſtanding its ſhortneſs, a regular pod.

Common Woad.

Iſatis vulgaris.

The root is long, thick, whitiſh, and furniſhed with many fibres.

The firſt leaves are large, oblong, and broad: they lie ſpread upon the ground, and they are of a bluiſh green colour, and firm ſubſtance.

The ſtalk riſes in the midſt of the tuft, and is round, woody, firm, of a greyiſh colour, and four feet high.

The leaves ſtand thick and irregularly on it, and are large and oblong: they are broad at the baſe, and narrower all the way to the point; and they are of the ſame fleſhy ſubſtance, and bluiſh green colour.

The flowers ſtand upon numerous, ſlender branches, into which the ſtalk divides at its top; and they are ſmall and yellow.

The ſeed-veſſels are oblong, and the ſeed is ſingle and large.

It is a native of the ſhores of the Baltic; but is cultivated in fields with us, and thrives very happily. It flowers in Auguſt.

C. Bauhine calls it *Iſatis latifolia ſativa*. This author, and others, deſcribe alſo a narrower-leaved *woad*, which they call the *wild* kind, as if a diſtinct ſpecies; but there is no other difference between theſe two plants than what culture gives. The *wild woad*, brought into a cultivated land, will have as large and broad leaves as the other, and has ariſen from ſcattered ſeeds of the manured kind upon leſs favourable ſoils.

The uſe of *woad* is for dying of woollen cloth. Its natural colour is blue; but it is alſo the baſis of ſeveral others: for this ſervice a vaſt quantity is annually raiſed in many parts of England.

GENUS IV.

SINAPISTRUM.

THE flower is compoſed of four petals, very ſingularly arranged; they do not expand themſelves croſs-ways, as the others of this claſs; but all incline upwards, and ſpread out from one another: two of theſe petals are ſmaller than the others. The cup is formed of four little leaves ſpread open, the lower leaf ſeparated as it were from the others; and there are three little glandules at the baſes of the three other leaves of the cup. The ſeed-veſſel is long and rounded, and is compoſed of two ſides, but contains only a ſingle cell: the ſeeds are numerous and round.

Linnæus places this among the *tetradynamia ſiliquoſa*, but with ſome repugnance to the characters of that claſs.

He ſays, in the *tetradynamia* four threads are longer than the reſt, and he gives them here as placed in the common manner: but he is obliged to acknowledge, that, in one ſpecies of this genus, there are twelve threads of equal length, ſo that the character of *tetradynamia* is wanting; and in another the threads grow upon the ſtyle: ſo that the plant, according to his diſtinctions, belongs to the *gynandria*; a particular and altogether diſtinct claſs.

This ſhews that no proper foundation of claſſes is to be found in theſe ſmall parts of flowers; for himſelf is obliged to arrange the two plants we here ſpeak of as ſpecies of the ſame genus, though, according to his ſyſtem, they belong to two utterly diſtinct claſſes.

This author alſo takes away the eſtabliſhed name of the claſs, and calls it *cleome*. We are no friends to theſe innovations, and have kept things here in their old channel.

Red, five-leaved Sinapiſtrum.

Sinapiſtrum pentaphyllæum flore rubente:

The root is compoſed of many ſlender fibres.

The firſt leaves are numerous, and have long and weak footſtalks: they ſtand five together on each of theſe, and are diſpoſed in a fingered manner: they are narrow, ſharp-pointed, and of a pale green.

The ſtalk is round, weak, reddiſh, and two feet high.

The leaves on it have long footſtalks, in the ſame manner as thoſe from the root; and they alſo ſtand five together; and are oblong, narrow, and of a faint green.

The flowers grow in a long ſpike, with the pods at the top of the ſtalks: they are large, and of a beautiful pale red.

The ſeed-veſſel is long and ſlender, and eaſily burſts with a touch, its valves or ſides being very weakly joined; the ſeeds are numerous, large, and roundiſh.

It is a native of Africa, and flowers in June.

C. Bauhine calls it *Quinquefolium lupini folio.* Others, *Sinapiſtrum pentaphyllum.*

The ſeeds are accounted a ſovereign remedy in obſtructions of the urinary paſſages; but they are in this reſpect confined to the natural place of the plant's growth. We have it in gardens; but its virtues are not regarded.

The END of the FIFTEENTH CLASS.

THE

THE

BRITISH HERBAL.

CLASS XVI.

Plants whoſe flower is compoſed of FOUR PETALS, *placed croſs-ways, and whoſe ſeed-veſſel is a* SHORT POD *or* SHALE.

THESE are the plants authors call *ſiliculoſæ*. They agree in all reſpects with thoſe of the preceding claſs; except in this, of the ſhape and ſtructure of the fruit, which is always truly diſtinct, and is an eſſential claſſical character. The *ſilicula*, or *ſhale*, is of a rounded or ſlightly angulated form, and is terminated by a long point which was in the flower, the ſtyle. It is always compoſed of two ſides or valves, and ſplits open lengthwiſe along their edges.

Linnæus places this claſs among the *tetradynamia*, diſtinguiſhing it after the manner of moſt others from the ſiliquoſe plants, or thoſe whoſe ſeed-veſſel is a regular pod, only by a ſubordinate arrangement. The difference, however, is ſufficient very well to ſupport the diſpoſing them in ſeparate claſſes; and hence will ariſe leſs confuſion. The young botaniſt will always find his progreſs in the ſcience the eaſier, the greater is the number of diſtinctions, provided they have juſt foundation in nature. His perplexity always ariſes from the great number under one general head.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are found naturally wild in this country.

GENUS I.

SEA COLEWORT.

CRAMBE.

THE flower is compoſed of four petals, which are placed regularly in a croſs direction; theſe are of an oval figure, and have very ſlender bottoms: the cup is formed of four little leaves, of an oblong, oval figure, and falls with the flower: the ſeed-veſſel is of an irregular figure, roundiſh, but ſomewhat oblong, and raiſed into four ridges, which terminate in one or more points.

This ſingular genus ſeems intended by nature to connect the ſiliquoſe and the ſiliculoſe kinds, or thoſe with long and ſhort pods, whoſe flowers are alike: accordingly authors have been divided in opinion under which of theſe two heads to arrange it. Ray places it among the ſiliculoſe, and Linnæus among the ſiliquoſe: but the ſtructure of the pod, when carefully examined, determines for the firſt named diſtribution.

Linnæus ranges it among the *tetradynamia*; four of the ſix threads in its flower being longer than the other two, as in the reſt of this, and the preceding claſs.

As we have no proper Engliſh name for the genus, it will be more proper to uſe the name *crambe*.

Linnæus

Linnæus explodes this, and gives to the genus that of *bunias:* but this will create in the mind of the young ſtudent a double confuſion, as it ſets aſide a received name, and as this now appropriated by Linnæus has been long uſed by authors in another ſenſe, expreſſing a plant of the former claſs, of the *turnep* or *navew* kind.

He alſo ſeparates ſome of the ſpecies under the name of *crambe*, becauſe the threads are ſplit at the top; but theſe are too ſlight accidents to characteriſe a genus.

DIVISION I. BRITISH SPECIES.

1. Smooth Crambe.

Crambe maritima braſſicæ foliis.

The root is long, thick, and divided into many parts.

The firſt leaves are very large, and numerous: they are oblong, very broad, deeply and irregularly ſinuated at the edges; of a thick, fleſhy ſubſtance, perfectly ſmooth, and of a bluiſh green: the ribs and veins are often purpliſh.

The ſtalk riſes in the centre of theſe, and is round, thick, whitiſh, upright, and branched: it grows to two feet and a half in height.

The leaves on this are few: thoſe toward the lower part reſemble ſuch as riſe from the root; but near the top they are ſmall, of an oval ſhape, pointed, and not at all waved at the edges.

The flowers ſtand at the tops of the ſtalks and branches, and are ſmall and white.

The ſeed-veſſels are ſhort and roundiſh, and in each is contained a ſingle large ſeed.

It is not uncommon on our ſea-coaſts, and flowers in June.

C. Bauhine calls it *Braſſica maritima monoſpermos*. In Engliſh it is called the *Sea cale*, or *Sea-cabbage*.

The people about the ſea-coaſts boil it in the way of ſavoys and cabbages, and the like; and it is very well-taſted, and perfectly wholeſome. This has led ſome to take it into their gardens, and it is preferred to moſt other kinds at table. The root creeps under the ſurface, and the leaves are green all winter.

2. Sea-Rocket.

Crambe foliis aſperis eruca marina dicta.

The root is long, ſlender, and furniſhed with numerous fibres.

The firſt leaves are few and ſmall: they are narrow, oblong, and a little indented; uſually there are about two notches on each ſide: theſe are of a yellowiſh green colour, and quickly fade.

The ſtalk is round, weak, of a pale green, and ſmooth, and is very much branched.

The leaves on this are numerous, broad, oblong, and very deeply cut at the edges, in a manner ſomewhat reſembling the pinnated diviſion: they are of a pale green colour, and of a fleſhy ſubſtance.

The flowers ſtand at the tops of ſtalks and branches; and are large, and of a purpliſh blue.

The ſeed-veſſels are ſhort, thick, and two-edged: the ſeeds are large and brown.

It is a native of our ſea-coaſts, and flowers in June.

C. Bauhine calls it *Eruca maritima Italica ſiliqua haſtæ cſupidi ſimili.* Others call it *Eruca marina*, and *Cakile*.

The people about the coaſts take the ſeeds in rheumatic caſes, and, as is reported, with ſucceſs.

DIVISION II. FOREIGN SPECIES.

Rough-podded Crambe.

Crambe ſiliculis bicriſtatis.

The root is thick, ſlender, and furniſhed with many fibres.

The firſt leaves are numerous, oblong, and deeply indented on the edges in a pinnated form: each leaf has four or five pairs of ſegments thus divided, and is terminated by an oblong piece; and theſe are all ſerrated and pointed.

The ſtalk is round, upright, weak, and not much branched: the colour is uſually a pale green, ſometimes rediſh, and it is hairy.

The leaves on it are not divided in the manner of thoſe at the root, but are oblong, and ſerrated at the edges.

The flowers ſtand at the tops of the ſtalks and branches, and are ſmall and yellow.

The ſeed-veſſel is ſhort, and of a rough, pointed, and creſted form: the ſeeds are oval and brown.

It is common in the ſouth of France, and flowers in July.

C. Bauhine calls it *Erucago monſpeliaca ſiliqua quadrangula echinata.* Van Royen, *Bunias*; and from this has ariſen Linnæus's uſe of that word as a name for the whole genus.

As we do not allow the *crambe* to be ſeparated from this otherwiſe than as ſpecies of the ſame genus, the diviſion of the threads in the flower not being a mark of greater diſtinction, we retain that name to the whole genus.

Linnæus authoriſes in other places the reducing to the ſame genus plants that have theſe little differences in their minute parts. We have given an inſtance of it in the *ſinapiſtrum*, even though it ſhakes his whole ſyſtem: here there would have been leſs objection to the ſame conduct.

GENUS II.

LUNAR VIOLET.

LUNARIA.

THE flower is compoſed of four petals diſplayed croſs-ways; they are large, obtuſe, undivided, and have ſlender bottoms of the length of the cup. The cup is formed of four leaves, of an oval or oblong figure, and convergent at their tops; there are two of them thick at the baſe: the ſeed-veſſel is of an elliptic or long-round figure, flatted, erect, and very large: it is terminated by a long point, and is formed of two valves, and divided into two cells or partitions by a membrane, which runs parallel with the ſides.

Linnæus places this among the *tetradynamia ſiliculoſa*; the threads of the flower being ſix, four of which are longer than the other two, and the ſeed-veſſel a proper ſilicula or ſhale.

Others have arranged it among the ſiliquoſe plants, or thoſe whoſe ſeed-veſſel is a regular pod; but erroneouſly. The diſtinctions in theſe caſes are ſmall, but they are ſufficient: the ſiliquoſe and ſiliculoſe plants of ſeveral genera approach very nearly to one another, but a ſtrict examination of the ſeed-veſſel will always ſhew without error to which claſs any plant truly belongs.

DIVISION I. BRITISH SPECIES.

Lunar Violet, with a wreathen pod.

Lunaria ſiliqua intorta.

The root is compoſed of a few threads.

The firſt leaves are oblong, ſomewhat broad, and of a greyiſh green: they are ſmall, and they grow in a thick tuft, partly riſing up, and partly ſpread upon the ground.

The ſtalk riſes in the midſt of this tuft; and is round, upright, ſlender, of a greyiſh colour, and eight inches high.

The leaves on it are placed irregularly; and they are oblong, broad, and of a bluiſh green.

The flowers ſtand at the tops of the ſtalks, and are ſmall and white.

The ſeed-veſſel is oblong and twiſted; and the ſeeds are kidney-ſhaped, and large.

It is found on our northern mountains, and flowers in April.

Petiver calls it *Lunaria contorta major*. Plukenet, *Lecoium ſive lunaria vaſculo ſublongo intorto*. Merret, *Paronychia Gnaphalii facie*.

This is mentioned a ſecond time, though with uncertainty, in the ſynopſis of Britiſh plants, under the name of *Paronychiæ ſimilis, ſed major perennis alpina repens*. The author ſuppoſed it might be the ſame with the former; and it has been found to be ſo by thoſe who have ſeen it in the places there mentioned with the ſeed-veſſels ripe.

DIVISION II. FOREIGN SPECIES.

1. Honeſty.

Lunaria ſiliculis ſubrotundis.

The root is a tuft of thick fibres.

The firſt leaves are few, and quickly fade; they are of a heart-faſhioned ſhape, and of an obſcure, duſky, green colour.

The ſtalk is round, upright, firm, branched, and three feet high.

The leaves on this are placed at diſtances; and they are large and heart-faſhioned, broad, and indented at the baſe, ſerrated at the edges, and ſharp-pointed: their colour is a duſky green, and they are lightly hairy.

The flowers are very numerous, and ſtand toward the extremities, and at the tops of the branches: they are long, and of a beautiful purple.

The ſeed-veſſel is very broad, and extremely thin: it is rounded, and terminated by a ſlender point, and when ripe has a ſilky or ſattiny appearance; whence the plant has been called the *ſattin-plant*, and *ſattin-flower*: the ſeeds are large, but not numerous.

It is a native of Germany, and flowers in May.

C. Bauhine calls it *Lunaria major ſiliqua rotundiore*. Others, *Viola lunaris vulgaris*, and *Bulbonach*. Its proper Engliſh name is the *Round-podded lunar violet*.

2. Lunar violet, with oblong pods.

Lunaria ſiliquis oblongis.

The root is compoſed of numerous, thick fibres, and remains the winter; whereas the other is an annual, dying as ſoon as the ſeed is ripened.

The firſt leaves of this are very large: they are ſhort and broad, indented at the baſe, ſerrated at the edges, and pointed at the ends.

The ſtalks are numerous, round, green, a little hairy, and three feet high.

The leaves on them reſemble thoſe from the root: they are ſhort, and heart-faſhioned, ſharply indented, and pointed; and they ſtand on ſlender, hairy footſtalks.

The flowers are placed at the tops of the ſtalks and branches; and are of a pale purple, large, and very handſome.

The ſeed-veſſels are thin and flat, like thoſe of the common kind; but they are oblong.

The ſeeds are few, large, and brown.

It is a native of Spain, and flowers in June.

C. Bauhine calls it *Viola lunaria major ſiliqua oblonga*.

The virtues of theſe plants are unknown; nor does it appear, from any manifeſt qualities, that they are worth regarding.

GENUS III.

WHITLOW-GRASS.

PARONYCHIA.

THE flower is compoſed of four petals, which open croſs-ways: they are of an oblong figure, and have very ſlender bottoms. The cup is formed of four little, hollow, oval leaves, which fall with the flower. The ſeed-veſſel is oblong, flatted, and has ſo ſmall a point at the extremity, that it appears almoſt deſtitute of any: it is compoſed of two valves, and divided into two cells by a membrane that runs parallel with them. The ſeeds are numerous and ſmall.

Linnæus places this among the *tetradynamia ſiliculoſa*; the threads in the flower being four longer and two ſhorter, and the ſeed-veſſel a regular ſilicule or ſhale.

This author aboliſhes the received name of the plants of this genus, and joins them with ſome others under the term *draba*.

DIVISION I. BRITISH SPECIES.

1. Common Whitlow-graſs.

Paronychia vulgaris.

The root is long, ſlender, and hung with a multitude of little fibres.

The leaves riſe in a thick tuft, and are ſmall, and of a duſky green: they are oblong and obtuſe, and not at all indented at the edges.

The ſtalks riſe in the center of this tuft of leaves, many together: they are upright, ſlender, yellowiſh, and three or four inches high.

There are no leaves on theſe, but uſually toward the tops a great number of flowers and ſeed-veſſels.

The flowers are ſmall and white.

The ſeed-veſſels are oval, flat, and yellowiſh; and the ſeeds are numerous, and very ſmall.

It is common on walls and the tops of houſes, and flowers very early in ſpring.

C. Bauhine calls it *Burſa paſtoris minor loculo oblongo*. Others, *Paronychia vulgaris*.

People lay the leaves bruiſed to whitlows on their fingers; but a common pultice would anſwer their purpoſe better; or theſe leaves, if uſed, ſhould be mixed with it.

The leaves of this plant are ſometimes ſlightly indented, and ſome have deſcribed it in this caſe under the name of a diſtinct ſpecies; but it is one of thoſe accidental varieties which will riſe from the ſame ſeeds with the other.

2. Branched Whitlow-graſs.

Paronychia ramoſa hirſuta.

The root is long, ſlender, and furniſhed with ſeveral fibres.

The firſt leaves riſe in a thick tuft; and are oblong, broad, of a duſky green, and hairy: they have no footſtalks, and they are ſharply ſerrated at the edges, and pointed at the ends.

The ſtalk riſes in the center, and is round, upright, very much branched, hairy, and ten inches high.

The leaves are placed irregularly, and are broad and ſhort: they are largeſt at the baſe, narrower all the way to the point, and ſerrated on the edges.

The flowers are ſmall and white: they ſtand in little tufts at the tops of all the branches.

The ſeed-veſſels are of an oval form, ſmall, flat, and yellowiſh; and, when the plant has flowered ſome little time, they ſtand in long ſpikes beneath the flowers: the ſeeds are ſmall and brown.

C. Bauhine calls this *Burſa paſtoris major locuto oblongo*. Others, *Thlaſpi foliis veronicæ*.

It is found on the hilly parts of our northern counties, and flowers in April.

DIVISION II. FOREIGN SPECIES.

1. Yellow Alpine Whitlow-graſs.

Paronychia lutea Alpina.

The root is thick, long, divided, and furniſhed with numerous fibres.

The leaves riſe from it in a very thick tuft, and ſtand extremely cloſe in vaſt numbers: they are very ſmall, ſhort, and ſharp-pointed: they are broad at the baſe, and not at all indented.

The ſtalks are numerous, weak, round, ſlender, and naked; and they are about three inches high.

The flowers ſtand at the tops, ſix or eight on each, and they have long and very ſlender footſtalks: they are ſmall, and of a bright yellow.

The ſeed-veſſels are oval and ſmall, and the ſeeds are very minute and brown.

It is a native of the Alps, and flowers in April.

C. Bauhine calls it *Sedum Alpinum luteum*; but the form of the ſeed-veſſel ſhews the error of that name. Moriſon calls it *Burſa paſtoris Alpina lutea roſea*. Columna, *Leucoium luteum aizoides montanum*. Some years the ſeaſon not favouring, it is very minute; but uſually it is of the ſize and form deſcribed here.

2. Branched yellow Whitlow-graſs.

Paronychia ramoſa flore aureo.

The root is long, ſlender, and furniſhed with many fibres.

The leaves riſe in a tuft without footſtalks; and they are broad, oblong, and of a pale green, very hairy, and lightly ſerrated at the edges.

The ſtalk is round, upright, hairy, whitiſh, and eight inches high.

The leaves on this are ſhort and broad, of a whitiſh green, very hairy, and ſoft to the touch.

The flowers ſtand in little tufts at the tops of the ſtalk and branches; and they are moderately large, and of a fine gold yellow.

The ſeed-veſſels are oval and ſmall, and they have a little white point: the ſeeds are ſmall and brown.

It is frequent in Germany, and flowers in May.

G. Bauhine calls it *Burſa paſtoris Alpina hirſuta.* Columna, *Draba minima muralis.*

GENUS IV.

SHEPHERDS PURSE.

BURSA PASTORIS.

THE flower is compoſed of four petals, which diſplay themſelves croſs-ways; they are ſmall, of an oval figure, and have very narrow bottoms: the cup is formed of four little, hollow leaves, which fall with the flower: the ſeed-veſſel is flat, large, and heart-faſhioned, narrow at the baſe, broad, and indented at the extremity, and full of ſmall ſeeds.

Linnæus ranges it among the *tetradynamia ſiliculoſa*; the flower having four longer and two ſhorter threads, and the ſeed-veſſel being a ſilicula. He does not keep it as a diſtinct genus, but makes it a ſpecies of *thlaſpi*.

The ſeed-veſſels of the *thlaſpi* are indeed parted by a nick at the end, but they have not the peculiar form of thoſe in this plant; which, from their reſemblance of a pouch or wallet, have obtained the herb a name peculiar to itſelf; and preſerved it through moſt writers.

There is but one known ſpecies of *ſhepherds purſe*, and that is a native of Britain. Authors have deſcribed ſeveral varieties of it as diſtinct ſpecies; but they all riſe from the ſame ſeed.

Common Shepherds Purſe.

Burſa paſtoris vulgaris.

The root is long, ſlender, white, and furniſhed with many fibres.

The firſt leaves are numerous, and they ſpread themſelves in a circular manner on the ground: they are long, narrow, and deeply indented along the edges in a pinnated manner: their colour is a duſky green.

This is their uſual form: but when the plant has little nouriſhment, they are ſometimes ſcarce at all divided; and, on the other hand, when it grows rank, they are ſinuated more frequently, and down to the rib: theſe are the two conditions in which the plant has been deſcribed as if of different ſpecies; in the one ſtate it has been called *ſhepherds purſe with undivided leaves*, and in the other *bucks-horn-leaved ſhepherds purſe*; but the ſpecies is the ſame in all, the degree of nouriſhment only making the difference.

The ſtalks riſe ſeveral together in the center of the tuft of leaves; and are round, tough, upright, and branched: their colour is a pale green, and they are a foot or more in height: the leaves on theſe are long and narrow; the lower ones are deeply ſerrated, the upper ones ſcarce at all; and they ſurround the ſtalk at the baſe.

The flowers are ſmall and white, and the ſeed-veſſels are broad and flat: the ſeeds are numerous, and very minute.

It is common in waſte places, and flowers all ſummer.

C. Bauhine calls it *Burſa paſtoris major folio ſinuato.* Others, *Burſa paſtoris vulgaris.*

That author, and many others, make the *whitlow graſs* a ſpecies of this genus; but very improperly, the form of the ſeed-veſſel being a moſt obvious mark of their diſtinction.

Shepherds purſe is an inſtance of a very great and important truth, that Providence has made the moſt uſeful things moſt common; and that men therefore neglect them. Few plants have greater virtues than this, which is yet utterly diſregarded.

A decoction of the dried herb is a gentle and ſafe aſtringent, good in fevers, attended with diarrhœas, and inferior to few things againſt an habitual purging.

The juice of the leaves is cooling and aſtringent: two ſpoonfuls of it, with one of red wine, are excellent againſt overflowings of the menſes.

A ſtrong decoction of the freſh plant is good againſt looſeneſſes attended with bloody ſtools, and againſt ſpitting of blood. Such and ſo uſeful is this common plant, trampled every where under foot as if poſſeſſed of no qualities.

GENUS V.

HORSE RADISH.

RAPHANUS RUSTICANUS.

THIS, like the ſhepherds purſe, is a plant diſtinguiſhed by Nature from all others, but which the modern writers of botany have, as in that inſtance, joined with thoſe to which it has no true alliance.

The flower is compoſed of four ſmall petals, which diſplay themſelves croſs-ways; theſe are of an

Trifoliate Toothwort

Seven leaved Toothwort

Five leavd Toothwort

Single leavd Toothwort

Broad leavd Arabis

Long leavd Arabis

Common Wood

Five leavd Sinapistrum

Smooth Cumbe

sea Rocket

Rough podded Cumbe

Honesty

Lunar Violet with Oblong Pods

Common Whitlow Grafs

Rounded Whitlow Grafs

Yellow Whitlow Grafs

Rounded Yellow Whitlow Grafs

Common Shepherds Purse

inverted oval figure, and have very ſmall bottoms within the cup. The cup is compoſed of four hollow, oval, little leaves, which ſtand gaping, and fall with the flower. The ſeed-veſſel is ſhort, ſomewhat compreſſed, blunt at the end, and terminated by a ſmall point: the ſeeds are few and ſmall, and the leaves are very large and [redacted].

Linnæus places this among the *tetradynamia ſiliculoſa*; the flower having four longer and two ſhorter threads, and the ſeed-veſſel being a ſingle regular ſilicule. He joins it with the ſcurvygraſs, taking away its original and more uſually received name. The ſhortneſs of the point at the ſeed-veſſel is a diſtinction of the ſmaller kind; yet it is a very certain and invariable character: but Nature has placed a much greater and more obvious mark in the form and external appearance of the whole plant.

The lepidium is much more nearly allied to the *raphanus ruſticanus* than the ſcurvygraſs is in nature; but even that is abſolutely diſtinct.

There is but one known ſpecies of *horſe radiſh*, though it varies oddly in the leaves; and that is a native of Britain.

Common Horſe Radiſh.

Raphanus ruſticanus vulgaris.

The root is long, thick, and white, of an acrid taſte, and of many years continuance in the ground.

The leaves are numerous, and extremely large: they are long, moderately broad, and of a freſh green. Naturally they are entire, or but ſlightly and irregularly dented at the edges; but ſometimes they are cut very deep into numerous pinnated ſegments.

The ſtalk is round, upright, firm, and two feet and a half high.

The leaves on this are oblong, narrow, and indented, and are of a freſher green than thoſe from the root.

The flowers ſtand at the tops of the ſtalks, and are ſmall and white.

The ſeed-veſſel is alſo ſmall and ſhort, and the ſeeds are few and ſmall.

It is common wild in the north of England, and we ſee it in uncultivated grounds, frequently about London, and elſewhere in the neighbourhood of towns. But it has in theſe places probably riſen from ſome of the roots thrown out of the houſes or gardens. In Cumberland, and ſome parts of Yorkſhire, it is abundant in places remote from houſes. It flowers in June.

C. Bauhine calls it *Raphanus ruſticanus*; and moſt others copy that name without alteration.

It is an excellent medicine in rheumatic caſes, and in all obſtructions of the viſcera. There is no way of taking it ſo good as eating of the ſcraped root in large quantities at table.

It works powerfully by urine, and brings away ſmall ſtones and gravel; at the ſame time it ſtrengthens the ſtomach, and aſſiſts digeſtion. It ſtands greatly recommended alſo againſt ſcorbutic complaints.

Two ſpoonfuls of the juice will operate as a vomit; but it does this roughly and diſagreeably.

GENUS VI.

DITTANDER.

LEPIDIUM.

THE flower is compoſed of four little, oval petals, which are diſpoſed regularly in a croſs direction, and have very narrow bottoms: the cup is formed of four little, pointed, gaping leaves, which fall when the flower decays: the ſeed-veſſel is ſhort, broad, and thick, with a very ſlight depreſſion at the end, and a very ſlender point annexed to it, which has been the ſtyle of the flower: the ſeeds are numerous, ſmall, and brown.

Linnæus places this among the *tetradynamia ſiliculoſa*; the flower having four longer and two ſhorter threads, and the ſeed-veſſel being a regular ſilicule.

He takes away the eſtabliſhed name of one plant of this genus, not allowing it to belong to it, but accounting it a ſpecies of ſcurvygraſs; this is the narrow-leaved kind: and the other he joins with naſturtium, calling them by that name. This tends to create confuſion. There is enough diſtinction both from the ſcurvygraſs and the *horſe radiſh* in the general form of the plants; but, beſide that, we have ſhewn there are diſtinctions in thoſe parts in particular upon which the characters of the genera are eſtabliſhed.

Theſe are more ſlight in general in this whole claſs than in moſt others: but, if they are properly attended to, they are ſufficient.

DIVISION I. BRITISH SPECIES.

Common Dittander.

Lepidium vulgare latifolium.

The root is ſlender, and runs obliquely under the ſurface: it is furniſhed with many fibres, and ſends up tufts of leaves, and young ſhoots of ſtalks, in ſeveral places.

The firſt leaves are very large, and of a deep green: they ſtand on long, ſlender footſtalks; and they are oblong, broad, and ſerrated at the edges:

edges: they are largeſt near the baſe, and ſharp-pointed.

The ſtalk is round, firm, upright, conſiderably branched, and three feet high.

The leaves on this are numerous, and they are placed irregularly: they have long, ſlender footſtalks, like thoſe from the root; and they reſemble them in ſhape, but they are ſmaller.

The flowers ſtand in great numbers at the tops of the numerous branches into which the ſtalk divides; and they are ſmall and white.

The ſeed-veſſels are ſmall and ſwelled: the ſeeds are numerous, very little, and brown.

It is common in our northern counties, and in ſome other places, and flowers in July.

C. Bauhine calls it *Lepidium latifolium*. Others ſimply, *Lepidium*.

The wh[redacted] plant has a violently acrid taſte, whence [redacted] common people call it *pepperwort*.

The leaves chewed, bring water into the mouth, and cure the toothach. Externally it is good againſt the ſciatica, and other ſtubborn pains. The women give a ſlight decoction of it to promote delivery; but it is not greatly to be recommended for that purpoſe. A ſlight infuſion of the freſh tops of the plant cut ſmall, works powerfully by urine, and brings away gravel.

In this form alſo it is no indifferent medicine againſt ſcorburic complaints.

DIVISION II. FOREIGN SPECIES.

Narrow-leaved Dittander.

Lepidium anguſtifolium.

The root is compoſed of numerous thick fibres.

The firſt leaves are very long and narrow: they grow in a large tuft, and are of a bluiſh green colour, and not at all indented at the edges.

The ſtalk is round, upright, firm, ſcarce at all branched, and two feet and a half high.

The leaves on this are numerous, and ſtand irregularly: they are long and narrow; but they are joined to the ſtalk by a broad baſe.

The flowers ſtand at the tops of the branches, and they are large and white.

The ſeed-veſſel is ſmall and brown, and the ſeeds are numerous and minute.

It is a native of Germany, and flowers in June.

C. Bauhine calls it *Lepidium glaſtifolium*. Others, *Lepidium anguſtifolium*, and *Lepidium erectum*.

GENUS VII.

SCIATICA CRESS.

IBERIS.

THE flower is compoſed of four extremely ſmall petals, of an inverted oval figure, diſpoſed croſs-ways, and having very ſmall bottoms. The cup is compoſed of four little leaves, which are oval and hollow, and fall with the flower. The ſeed-veſſel is ſmall and flatted, and is ſharp at the edge: the ſeeds are numerous and ſmall.

Linnæus places this among the *tetradynamia ſiliculoſa*; but he has diſpoſed the plant itſelf in a very injudicious manner, and very idly played with its generical name.

The plant commonly known by the word *iberis* he has placed among the *naſturtiums*, which he has called by a new name, *lepidium*, taking that alſo from the plant to which it properly belongs: and in the ſame claſs he has another genus of plants, among which many of the *thlaſpis* are introduced under the name of *iberis*, while the proper *iberis* itſelf is in another.

This is a ſort of confuſion that, to the young ſtudent, will appear inextricable; and it is in itſelf extremely wrong.

The plant *iberis*, which he has without reaſon put out of the genus called after its name, he might, upon the foundation of his ſyſtem, have removed altogether out of this claſs, for it has not ſix threads, as the reſt, four longer and two ſhorter, whence the name of the claſs *tetradynamia*; but only two: it is therefore in abſolute violation of his eſtabliſhed ſyſtem, that the *iberis* comes among theſe plants. At the ſame time it is very plain, that the *iberis* is one of the ſiliculoſe herbs; and therefore, that the diſtinction of four longer and two ſhorter threads is not an abſolute character of that claſs. This is one of thoſe numerous inſtances we have recited occaſionally, as the ſubjects occurred, to ſhew that the ſyſtem of this author, though recommended by its novelty to weak minds, and by its difficulty to thoſe who are ambitious of underſtanding abſtruſe things, is not founded in nature, reaſon, or truth.

The diſtinctions of theſe ſiliquoſe and ſiliculoſe plants are leſs accurate in nature than thoſe of any others; wherefore endleſs cavils may be raiſed againſt any generical diſpoſition of them that ever ſhall be propoſed. The moſt uſeful method of treating them is therefore to keep as near the eſtabliſhed tract as a tolerably nice diſtinction will admit.

Authors have not ſeen the cauſe of this difficulty; but it is plainly this: the cruciform podded plants are indeed but a ſingle claſs; and this contains properly but two genera, the ſiliquoſe making one genus, and the ſiliculoſe another. We do a violence to Nature in erecting theſe genera into the rank of claſſes; but it is neceſſary, and in the higheſt degree uſeful; and this having been once done, ſhould therefore have remained inviolable.

There

There is no part of Linnæus's conduct that will in manys caſe bear leſs palliation thar this. I have taken occaſion thus far to explain here my reaſons for differing from him, as the plant which is coming under conſideration is in itſelf, and in its proper name, one of the moſt ſtriking inſtances of this fault.

Of this plant, diſtinguiſhed by its proper characters, of which the extreme ſmallneſs of the petals is the principal, there is but one ſpecies. This is deſcribed by the antients under the name *iberis*, and has virtues attributed to it with juſtice which belong to no other plant in ſo eminent a degree. This is a farther reaſon for preſerving its name, continuing it appropriated to the plant, and giving it to no other.

Sciatica Creſs.

Iberis.

The root is long, ſlender, and furniſhed with many fibres.

The firſt leaves are numerous, ſmall, oblong, and of a pale green. They riſe in a thick tuft: they have no footſtalks, but are narroweſt at the baſe, and broadeſt toward the end; and they are indented at the edges.

The ſtalk is round, upright, and divided into many branches: it is of a pale green colour, and about ten inches high.

The leaves on the main ſtalk, toward its lower part, are oblong, broad, and ſharply ſerrated, like thoſe from the root; but thoſe on the branches, and on the upper part of the ſtalk, are narrow, and undivided at the edges, and of a paler green.

The flowers ſtand in great numbers on the tops of the branches, and they are ſmall and white.

The ſeed-veſſel is ſmall and broad, and the ſeeds are numerous and minute.

It is frequent in the ſouthern parts of England, though leſs common in other places. It flowers in July.

C. Bauhine calls it *Iberis latiore folio.* Others, *Iberis.*

Dioſcorides ſpeaks with great earneſtneſs of the virtues of this plant againſt the ſciatica; and we read in other of the old Greeks, and in the Romans who copied them, the moſt ſurpriſing accounts of its efficacy in the ſame diſorder. The manner in which they uſed it was this.

They bruiſed a great quantity of the root in a mortar, and mixed in with it hogs lard. This ointment they rubbed well in, not only on the hip, but alſo up the ſide, and all down the thigh; and after this they covered the parts with a vaſt plaiſter of it, ſpread to a conſiderable thickneſs.

This application was ſuffered to remain on four hours, or in tenderer bodies only three; and in this time it acted as a ſinapiſm, heating and inflaming the ſkin.

It was then taken off, and the parts ſoftly anointed with oil and wine, and the perſon afterwards was put into a warm bath. Upon coming out, the part was wrapt round with a good thickneſs of ſoft wool; and this generally performed a cure at once. If any pain remained, or the diſorder threatened to return, the ſame method was repeated at the end of three weeks.

Our country people in ſome places uſe the bruiſed herb for the ſame purpoſes, and with great ſucceſs; but it is not ſo much regarded as it deſerves in the common courſe of practice.

GENUS VIII.

GOLD OF PLEASURE.

MYAGRUM.

THE flower is compoſed of four petals, which open in a regular croſs direction: they are ſmall, roundiſh, and obtuſe at the ends, and they have very narrow bottoms. The cup is compoſed of four little leaves; they are oval, hollow, and ſtand apart; the whole cup is coloured, and falls with the flower: the ſeed-veſſel is ſhort and ſwelled, of a ſomewhat heart-faſhioned form, and terminated by a firm point.

Linnæus places this among the *tetradynamia ſiliculoſa*; the flower having four longer and two ſhorter threads, and the ſeed-veſſel being a regular ſilicule. He alſo joins very properly under the ſame name ſeveral plants, improperly called by others ſpecies of *alyſſum*; a genus of very different character.

DIVISION I. BRITISH SPECIES.

1. Common Myagrum.

Myagrum vulgare.

The root is long, ſlender, white, and furniſhed with many fibres.

The ſtalk is round, firm, upright, a foot and half high, and divided into a great number of branches.

The leaves are numerous, and they are placed with an agreeable regularity from its bottom to its top: they are oblong, narrow, and of a pale green: they adhere to the ſtalk by a broad baſe, and are from thence ſmaller to the extremity, where they terminate in a point; and they are ſharply ſerrated at the edges.

The flowers ſtand in little tufts at the tops of the branches, and are of a gold yellow.

The ſeed-veſſels are ſhort and hard: the ſeeds are yellow.

It is found in corn-fields in ſome parts of England, and flowers in July.

C. Bauhine

C. Bauhine calls it *Myagrum ſativum*. Others, *Myagrum vulgare*, and *Myagrum ſylveſtre*.

In ſome of thoſe parts of England where they raiſe flax, the plant is very common: the ſeeds of it paſs unnoticed among thoſe of that herb, and conſequently it riſes with the crop from one year to another.

The ſeeds of this plant afford a ſweet and uſeful oil in very conſiderable quantity: it is greatly inferior to the common olive-oil, but there are many purpoſes it will anſwer very well in its place.

DIVISION II. FOREIGN SPECIES.

1. Broad-leaved Myagrum.

Myagrum latifolium majus.

The root is long, ſlender, and furniſhed with many fibres.

The firſt leaves riſe in a numerous cluſter; and they are oblong, conſiderably broad, and of a deep green: they have no footſtalks: they are very little and very irregularly ſinuated at the edges, and obtuſe at the end.

The ſtalk is round, firm, upright, and two feet high: it is divided into many branches.

The leaves on this are placed irregularly, and are broad, and ſomewhat heart-faſhioned: they ſurround the ſtalk at the baſe, and thence terminate in an obtuſe end.

The flowers ſtand at the tops of the branches, and are ſmall and yellow.

The ſeed veſſels are ſhort, hard, and terminated by a point; and in each there is only a ſingle ſeed.

The veſſel has three cells, but two of them are empty.

It is a native of France and Italy, where it is common in their corn-fields, as ours is here. It flowers in June.

C. Bauhine calls it *Myagrum monoſpermum latifolium*. Others have followed the ſame name, and ſome have called it ſimply *Myagrum majus*.

2. Myagrum with flat, dotted pods.

Myagrum ſiliculis compreſſis punctatis.

The root is long, ſlender, and furniſhed with a few fibres.

The firſt leaves riſe in a great cluſter; and they are large, oblong, and conſiderably broad: they are placed irregularly, ſome ſtanding up, others lying on the ground; and they are not at all indented at the edges.

The ſtalk riſes in the midſt; and is round, upright, of a whitiſh colour, firm, and a foot and a half high: it is divided into many branches, and ſet thick with leaves toward the top, though there be fewer near the bottom.

Theſe are oblong, broad, and of a pale green: they ſurround the ſtalk at the baſe, and are there broad, and ſomewhat heart-faſhioned; and they grow gradually ſmall from thence till they terminate in a point.

The flowers grow in little tufts at the tops of the ſtalks, and they are ſmall and white.

The ſeed-veſſel is of a roundiſh form, and of a firm ſubſtance, dotted, and rough on the ſurface, and terminated by a ſtiff point.

The ſeed is large, yellow, and oily.

It is common about the borders of vineyards in France and Italy, and flowers in July.

C. Bauhine calls it *Myagro ſimilis ſiliqua rotunda*. Others, *Myagrum hirſutum*.

The ſeeds of this kind are excellent againſt the gravel: they have an oily ſoftneſs, and a powerful diuretic quality. The peaſants in Italy eſteem it; but there, like many good medicines here, it is neglected in regular practice.

GENUS IX.

WATER RADISH.

RADICULA.

THE flower is compoſed of four petals, regularly opening in a croſs direction; they are oblong, obtuſe, and have very ſmall bottoms: the cup is formed of four narrow, ſharp-pointed leaves, that gape aſunder; and it is coloured, and falls with the flower; the ſeed-veſſel is ſhort, and of a figure approaching to oval, with a ſmall, weak point: the ſeeds are numerous and ſmall.

Linnæus places this among the *tetradynamia ſiliquoſa*; but he has not arranged it well. It is a ſiliculoſe, not a ſiliquoſe plant, as appears by the form and ſtructure of the ſeed-veſſel; therefore it belongs to the other diviſion, the *tetradynamia ſiliculoſa*. But this is not all that will miſlead the ſtudent in his arrangement of it. He has taken away its generical and received name, and makes it a ſpecies of *ſiſymbrium*, joining it in with the *ladyſmock* and *watercreſs*. He calls it the *ſiſymbrium with pods of an oval, oblong figure*.

This author's generical character of the *ſiſymbrium* ſays, that the pod is long; therefore the very terms are diſcordant. It is a ſtrange force upon method, to introduce theſe plants, which he is obliged to diſtinguiſh by the ſhortneſs of their pods, into a genus, the character of which is to have long ones.

The ſpecies of *ſiſymbrium* are very numerous, and conſequently the road to knowledge very much perplexed according to that diſpoſition. We ſhall clear it farther, by reducing more of the plants to their diſtinct and proper genera, and reſtoring them to their uſual and received names.

DIVISION I. BRITISH SPECIES.

1. Pinnate-leaved Water Radiſh.

Radicula foliis pennatifidis.

The root is long and ſlender: it is furniſhed with many fibres, and pierces to a great depth.

The firſt leaves are very deeply divided in the pinnated form; but their ſegments are not cut quite to the rib, but are united at the baſe by a thin ſlip, running the whole length of the rib: they are oblong, and conſiderably broad, and of a freſh green.

The ſtalk is round, green, branched, and weak: it riſes to a foot and a half in height, and is of a pale colour.

The leaves on it are numerous, and they have the ſame diviſion in the pinnated form with thoſe of the root, but it is leſs regular.

The flowers ſtand at the tops of the ſtalks, and are ſmall and yellow.

The ſeed-veſſels are ſhort, and of an oval figure, ſwelled, ſoftened, and full of little brown ſeeds.

It is common by waters, and flowers in July.

C. Bauhine calls it *Raphanus aquaticus foliis in profundas lacinias diviſis*. Others, *Raphanus aquaticus vulgaris*.

2. Serrated-leaved Water Radiſh.

Radicula foliis ſerratis.

The root is oblong and thick: it creeps under the ſurface, and ſends out from different parts cluſters of ſlender fibres.

The firſt leaves riſe in ſmall tufts; and uſually there are many of theſe form different parts of the ſame root. They are oblong, broad, and of a duſky green; and they are once dentated, and that very deeply near the baſe, the reſt of their edge being undivided.

The ſtalks riſe among theſe, and are round, firm, upright, and two feet high.

The leaves on them are numerous, and they are placed irregularly: they are long, narrow, and of a pale green; ſharp-pointed, and ſerrated at the edges, but not deeply.

The flowers ſtand at the tops of the ſtalks in little tufts, and are large and yellow.

The ſeed-veſſels are ſhort and roundiſh: the ſeeds are numerous, ſmall, and brown.

It is common about the ſides of ditches, and flowers in Auguſt.

C. Bauhine calls it *Raphanus aquaticus alter*, as diſtinguiſhing it from the preceding; and moſt authors copy the ſame name, though ſo very idle and u expreſſive.

Linnæus ſuppoſes the two plants to be the ſame ſpecies, differing only from accidents of growth, the one having more water than the other; and ſhewing it in the form of the leaves. But this is an error: they differ in the ſhape of the leaves, in the form and diſpoſition of the roots, and in the bigneſs of the flowers. More cannot be required for the diſtinction of the ſpecies in any one from another.

Indeed there will happen ſome farther accidental variations under particular circumſtances; and from theſe ſome have eſtabliſhed imaginary ſpecies, which it is fit to reduce to the common kinds; though not thoſe two to one.

Thus, when a part of the firſt ſpecies is continually under water, theſe leaves which grow from ſuch part of the ſtalk, will be divided into fine capillary ſegments, in the ſame manner as thoſe of the various-leaved water-crowfoot, which are always immerſed under the ſurface.

In this ſtate the plant has been deſcribed by Linnæus in ſome of his earlier works, and by Van Royen, Dalibard, and others, under the name of *ſiſymbrium*, with the lower leaves capillaceous, and the others pinnatifid.

In a very dry ſituation ſome of the upper leaves of the ſecond ſpecies here deſcribed will be deeply ſerrated ſo as to appear pinnatifid.

In this ſtate Valliſnieri has deſcribed it as a new ſpecies, under the name of *ſiſymbrium*, with various leaves; and Haller under that of *ſiſymbrium*, with the lower leaves oval and ſerrated, and the upper ones pinnated.

The reducing theſe to their proper ſpecies as varieties, for they are evidently nothing more, takes off the imaginary foreign kinds of *radicula*; and they are, by the accuſtomed and judicious eye, eaſily referred each to the plant to which it belongs: but it is purſuing a juſt reduction to extravagance and error, to deſire to make two abſolutely different ſpecies paſs for one, becauſe each has its varieties, which may be referred to it. This is one of the inſtances of that common miſtake, the not knowing where to ſtop.

The freſh leaves of the *water radiſh* work by urine; and the ſeeds have the ſame quality, but in no great or eminent degree.

The juice is in ſome places drank for the ſcurvy with ſucceſs.

GENUS X.

SCURVYGRASS.

COCHLEARIA.

THE flower is compoſed of four petals, diſplayed croſs-ways; they are ſmall, ſhort, and of an inverted oval figure; they ſpread open, and have ſhort bottoms. The cup is formed of four oval, hollow, little leaves; they gape open, and fall with the flower: the ſeed-veſſel is heart-faſhioned, and ſlightly flatted, obtuſe at the end, ſomewhat rough, and pointed with the remain of the ſtyle.

Linnæus places this among the *tetradynamia ſiliculoſa*; the flower having four longer and two ſhorter threads, and the ſeed-veſſel being a proper ſilicule.

He introduces into the ſame genus the horſe-radiſh, and ſome others, which do not agree with the characters himſelf has eſtabliſhed for aſcertaining the diſtinction, we have therefore removed theſe to their proper places.

DIVISION I. BRITISH SPECIES.

1. Common Scurvygraſs.

Cochlearia foliis ſubrotundis.

The root is long, ſlender, white, and furniſhed with ſeveral little fibres.

The firſt leaves riſe in a large tuft, and have long and thick footſtalks: they are ſhort, broad, and of a figure approaching to round, but ſomewhat indented at the baſe, and ſinuated variouſly and irregularly at the edges.

The colour of theſe leaves is a freſh, bright green; and they are of a very tender, juicy ſubſtance.

The ſtalks are numerous, round, of a pale green, ten inches high, and not very firm: they are but little branched, and have only a few leaves.

Theſe are oblong, narrow, and altogether unlike thoſe from the root: they ſtand in pairs, one, two, or three pair on each ſtalk, and are of a faint green.

The flowers grow at the tops of the branches in little tufts, and they are ſmall and white.

The ſeed-veſſels are ſmall, and the ſeeds are numerous and minute.

It is common on our ſea-coaſts, and flowers in May.

C. Bauhine calls it *Cochlearia folio ſubrotundo.* Others, *Cochlearia rotundifolia.*

It gets a place in gardens from its uſe and virtues, and has thence alſo obtained the name of *garden ſcurvygraſs*, and *cochlearia hortenſis.* Some alſo call it *Dutch ſcurvygraſs.*

It is not only found upon the ſea-coaſts, but in many parts of England on hills near ſprings.

In theſe places the leaves are ſmaller, and more perfectly round; and under this form it has been deſcribed as a diſtinct ſpecies; but the ſeeds being ſown in a garden, produce the common kind.

The *cochlearia rotundifolia* of Merret, named in the laſt edition of Ray's ſynopſis, and the *cochlearia rotundifolia parva Batava* of Lobel, are this variety of the *common ſcurvygraſs*, and not any diſtinct ſpecies.

2. Jagged-leaved Scurvygraſs.

Cochlearia folio ſinuato.

The root is ſmall, longiſh, and furniſhed with innumerable fibres.

The firſt leaves riſe in a little cluſter, and have very ſhort footſtalks: they are of an oblong figure, broadeſt toward the baſe, ſharp at the point, and deeply and irregularly cut in along the edges.

Their ſubſtance is fleſhy: they are full of juice, and their colour is an obſcure green.

The ſtalks are numerous, thick, juicy, of a pale green, and ten inches high.

The leaves on theſe reſemble thoſe at the root in their general form; but they have no footſtalks, and they are more ſlightly notched at the edges.

The flowers ſtand at the tops of the branches in little cluſters, and they are ſmall and white.

The ſeed veſſel is ſhort and tender: the ſeeds are numerous and ſmall.

It is common in our ſalt-marſhes, and on the ſea-ſhores, where the bottom is mud. It flowers in May.

C. Bauhine calls it *Cochlearia folio ſinuato*; and moſt other writers take the ſame name: but ſome call it *Cochlearia vulgaris*, and ſome *Cochlearia Britannica.*

It has commonly in our markets the name of *ſea ſcurvygraſs*, by way of diſtinction from the other called, as we have ſaid, *garden ſcurvygraſs*; and it has alſo the name of *Engliſh ſcurvygraſs*, by way of diſtinction from that other kind called *Dutch:* but theſe are very ill choſen and unexpreſſive terms. Names taken from the ſhape of the leaves, which is the true mark of their difference, would be much more proper.

3. Little ſhort-leaved Scurvygraſs.

Cochlearia minor foliis brevibus.

The root is a tuft of long, ſlender fibres, connected to a little head.

The firſt leaves are ſupported on long fleſhy footſtalks; and they are ſmall, and of a roundiſh figure, but irregularly ſinuated at the edges, and terminated by a ſhort point.

The ſtalks are very numerous, weak, of a pale green, ſcarce at all branched, and five inches high.

The leaves on theſe reſemble thoſe from the root: they are broad, ſhort, roundiſh, and ſinuated on the edges.

The flowers are larger than in the others, and of a milky white.

The ſeed-veſſels are ſhort, and the ſeeds are numerous and ſmall.

It is found on the ſea-coaſt of Wales, and flowers in April.

Ray calls it *Cochlearia minor rotundifolia.* It may be called *Welch ſcurvygraſs.*

4. Ivy-leaved Scurvygraſs.

Cochlearia foliis anguloſis parvis.

The root is ſlender, long, white, and furniſhed with many fibres.

The firſt leaves riſe in a very ſmall but thick tuft: they are ſupported on ſhort and ſlender footſtalks, and are divided into three parts, in the manner of many of the leaves of ivy: they are of a thick, fleſhy ſubſtance, and of a browniſh colour uſually, though ſometimes of a freſh and lively green.

The ſtalks are very numerous: they are round, thick, brown, and tolerably upright, except in the lower part, where they uſually lean a little upon the ground, and they are ſix inches high.

The leaves on theſe are more numerous than on almoſt any of the other kinds, and they perfectly reſemble thoſe from the root: they are ſupported on long, ſlender footſtalks, and are three pointed as the others.

The flowers are ſmall and white: they ſtand in little tufts at the tops of the ſtalks.

The ſeed-veſſels are very ſhort, and the ſeeds are numerous and ſmall.

It is found on the coaſt of Lancaſhire.

Ray calls it *Cochlearia marina folio anguloſo parvo.*

The earlier botaniſts ſeem to have deſcribed it, though they have referred it to a wrong genus. Lobel calls it *Thlaſpi hederaceum*, and our Gerard and Parkinſon from him *Thlaſpi hederaceo folio.*

All theſe ſpecies have the ſame virtues, and they are very conſiderable. The firſt and ſecond kind here deſcribed are moſt uſed; and of theſe, the preference given by cuſtom to the firſt, is due in reality to the ſecond.

It is ſo eminent in the cure of the ſcurvy, that it is thence named in our language. The juice is taken in ſpring; and no way is better. Some give the infuſion, which has alſo a great deal of virtue; but the method of brewing it in ale is alſo uſeful.

A conſerve of the freſh top is another very good method of taking it.

The ſcurvy, under various forms and appearances, is ſo common in this kingdom, and the virtues of this plant are ſo ſovereign againſt it, that its uſe cannot be too much recommended. In ſpring, when the herb is in ſeaſon, the juice ſhould be uſed; after this the conſerve, ſo long as it retains its virtue; and, when it is not to be had in other forms, a weak beer brewed with it will be very ſerviceable. It is a method by no means to be uſed inſtead of the others, but may have its effect when they cannot be had. To have any conſiderable efficacy, the malt liquor muſt be in itſelf ſmall: it muſt be very ſtrong of the herb, and it muſt be uſed for the common drink.

The freſh leaves of *ſcurvygraſs*, bruiſed, and laid to the face for a few hours, are recommended to take off ſpots and ſunburn; and, when the ſkin can bear them, they will take this effect: but thoſe who have delicate complexions take moſt care of them; and ſuch cannot bear it.

DIVISION II. FOREIGN SPECIES.

Purple-flowered Scurvygraſs.

Cochlearia floribus purpuraſcentibus.

The root is long, ſlender, and furniſhed with many fibres.

The firſt leaves are very numerous, and are ſupported on ſhort, rediſh, tender footſtalks: they are of a roundiſh figure, but ſomewhat oblong, and ſinuated at the edges.

The ſtalk is round, upright, firm, and ten inches high.

The leaves ſtand irregularly on it, and are of an oval figure, broad at the baſe, where they adhere to the ſtalk, and ſmaller to the end, where they terminate obtuſely; and they are variouſly and irregularly indented at the edges.

Some of the leaſt leaves toward the top of the ſtalk have only two notches. This gives them ſome reſemblance to the ivy-leaved kind juſt deſcribed; but they are longer, and the whole plant is altogether different.

The flowers ſtand in little cluſters at the tops of the ſtalks and branches: they are ſmall; but they are of a very beautiful pale purple.

The ſeed-veſſels are large and oval: the ſeeds are very numerous and brown.

It is a native of Denmark, and flowers in April.

Moriſon calls it *Cochlearia minima Armorica flore dilute violaceo.*

Its virtues are the ſame as thoſe of the others.

GENUS XI.

CRESS.

NASTURTIUM.

THE flower is compoſed of four petals, which expand croſs-ways: they are ſmall and oblong, largeſt at the top, where they terminate obtuſely, and terminated by very narrow bottoms in the cup. The cup is formed of four, little leaves, which are of an oval figure, and hollowed, and it falls with the flower: the ſeed-veſſel is rounded, but ſlightly ſinuated at the top, ſomewhat compreſſed, and ſharp at the edges: it is divided into two cells, and in each is a ſingle ſeed.

Linnæus places this among the *tetradynamia ſiliculoſa*; the flower having four longer and two ſhorter threads, and the ſeed-veſſel being a regular ſilicule: but he has introduced great confuſion into the ſcience by his conduct and diſpoſition of it.

He takes away the name *creſs*, *naſturtium*, and calls all the plants belonging to it ſpecies of *lepidium*. This has been raſhly done; and he ſeems ſince to have perceived it; for, at the end of the generical character, he adds, that the ſeed-veſſel of *lepidium*, commonly ſo called, is not ſharp at the edges, or ſinuated at the top; therefore *lepidium* is not properly a ſpecies of this genus, though he has uſed its name for the generical term.

We

We have ſeparated that genus into its proper place, and ſome others introduced in this confuſed manner by the ſame author into their proper genera; and ſhall here treat diſtinctly of thoſe ſpecies properly underſtood by the name *creſs* or *naſturtium*, and ſeparated by thoſe characters here eſtabliſhed from all the other ſiliculoſe plants.

DIVISION I. BRITISH SPECIES.

1. Narrow-leaved Creſs.

Naſturtium anguſtifolium.

The root is long, thick, white, and furniſhed with many fibres.

The leaves that riſe from it are oblong, and narrow, and form a little thick tuft: they are of a pale green, cut in deeply at the edges, and ſharp-pointed.

The ſtalk is round, thick, firm, upright, very much branched, and a foot or more in height.

The leaves ſtand thick upon it, and in a perfectly irregular manner: they are oblong, narrow, and of a pale green: they have no foot-ſtalks; they are not at all indented at the edges, and they terminate in a ſharp point.

The flowers ſtand at the tops of the branches in little cluſters, and they are very ſmall and white.

The ſeed veſſels are ſhort and hard: the ſeeds are large and brown.

The whole plant has a ſtrong acrid taſte.

It is common by the road-ſides in Eſſex, and ſome other parts of the kingdom, though utterly unknown in many counties. It flowers in July.

C. Bauhine calls it *Naſturtium ſylveſtre oſyridis folio.* Others, *Thlaſpi anguſtifolium*, and *Thlaſpi minus.*

The plant in its general aſpect has much of the appearance of the *common garden-creſs*, eſpecially while the radical leaves remain; but they are generally of ſhort continuance, fading as the plant flowers.

2. Rock Creſs.

Naſturtium pumilium petræum.

The root is ſlender, oblong, and furniſhed with a great number of ſmall fibres.

The firſt leaves riſe in a ſmall round tuft: they are oblong, narrow, and very deeply ſinuated at the edges; ſo that they have much the appearance of the pinnated diviſion: they are of a pale green at their firſt growth, but they ſoon become brown.

The ſtalks riſe among theſe ſeveral together; they are round, ſlender, upright, and about four inches high.

The leaves on them are very ſmall and few; ſometimes they are altogether naked, and there are rarely more than two or three on the ſtalk when the plant is moſt vigorous and healthful: theſe are ſhort, and deeply divided into three or four ſegments.

The flowers ſtand at the top in a little tuft, and they are very ſmall and white.

The ſeed-veſſel is ſhort, and the ſeeds are very ſmall.

The flowers laſt but a little while on this plant; but there are uſually found on the tops of the ſtalks cluſters of the ſeed-veſſels, which get a brown colour.

It is not uncommon in barren hilly places. It flowers in April.

Tabernamontanus calls it *Naſturtium petræum*; a name moſt have copied: but ſome call it *Burſa paſtoris minor.*

3. Rocket-Creſs.

Naſturtium foliis erucæ.

The root is long, ſlender, white, and furniſhed with many fibres.

The firſt leaves grow in a little tuft, and are oblong, and deeply divided in the pinnated manner: they are of a faint green, and of a tender ſubſtance.

The ſtalk is round, firm, upright, branched, and a foot high.

The leaves on it reſemble thoſe from the root; but they are ſmaller, narrower, and more divided: the ſegments are very ſlender, a little waved, and pointed at the ends.

The flowers are ſmall, and ſtand in tufts at the tops of the branches.

The ſeed-veſſels are alſo ſmall, and the ſeeds are brown.

It is found on ſome hilly paſtures, and flowers in Auguſt.

C. Bauhine calls it *Naſturtium ſylveſtre erucæ affine.* Others, *Eruca naſturtio cognata tenuifolia.*

It has much the aſpect in general of the *rocket* kind.

4. Fine-leaved Creſs.

Naſturtium foliis tenuiſſime diviſis.

The root is a ſmall, oblong fibre, with a few very ſlender threads hanging from it in various parts.

The firſt leaves riſe irregularly, a few in a cluſter, and are of a pale green: they are oblong, narrow, and very beautifully divided in the pinnated manner: each conſiſts of ſix or eight pairs of extremely fine ſegments, and an odd one at the end; but they are all connected by a rim of leaf that runs all along the middle rib.

The ſtalks riſe in the midſt of this tuft, and are numerous, weak, ſlender, and very much branched.

The flowers are ſmall and white: they ſtand at the tops of the branches in little cluſters.

The pods are ſhort and very ſmall, and the ſeeds are minute and yellowiſh.

It is found on the hilly paſtures in the weſt of England, and among rocks. It flowers in May.

Ray calls it *Naſturtiolum montanum annuum tenuiſſime diviſum.* Plukenet, *Naſturtium petræum annuum noſtras.*

5. Swines



Common Horse Radish



Common Dittander



Narrow leaved Dittander



Common Hoary



Common Myagrum



Broad leaved Myagrum



Myagrum with flat dotted Pods



Pinnated leaved water Radish



Serrated leaved water Radish



Round leaved Scurvy grass



Jagged leaved Scurvy grass



Ivy leaved Scurvy grass



Purple flowered Scurvy grass



Narrow leaved Cress



Rock Cress



Fine leaved Cress



Annual Cress



Garden Cress

5. Swines Creſs.

Naſturtium ſupinum capſulis verrucoſis.

The root is long, ſlender, white, and furniſhed with many fibres.

The firſt leaves ſpread themſelves beautifully upon the ground, forming a regular circle: they are long, moderately broad, and very deeply divided in the pinnated manner, and their colour is a freſh and pleaſant green: the ſegments are narrow, and divided into three points, or notched on each ſide at the end.

The ſtalks are numerous, round, green, and divided into many branches: they are thick and firm; but they do not riſe up from the ground, ſpreading themſelves every way like the leaves.

The flowers grow in cluſters in the boſoms of the leaves, and they are ſmall and white.

The ſeed-veſſels are ſhort and rough: the ſeeds are ſmall and brown.

It is common every where by way-ſides, and flowers in May.

C. Bauhine calls it *Ambroſia campeſtris repens.* Others, *Coronopus Ruellii.*

All theſe creſſes are good againſt ſcorbutic complaints; and operate by urine. The laſt ſpecies is of late years become famous as an ingredient in thoſe medicines, the receipt for which the government purchaſed of Mrs. Stevens for the cure of the ſtone.

DIVISION II. FOREIGN SPECIES.

1. Garden Creſs.

Naſturtium foliis variis.

The root is long and ſlender, and has numerous fibres.

The firſt leaves are long, narrow, and variouſly and irregularly divided: they are of a freſh green colour, a tender ſubſtance, and a pleaſing acrid taſte.

The ſtalk is round, upright, firm, and of a whitiſh green, not much branched, and two feet high.

The leaves on this are numerous, and placed irregularly: they are divided in the pinnated manner into narrow ſegments, very variouſly and irregularly, as thoſe at the root; but the diviſions of theſe are narrower.

The flowers ſtand at the tops of the ſtalks and branches, and are ſmall and white.

The ſeed-veſſels are alſo ſmall: the ſeeds are brown.

It is a native of Germany, but is ſown in our gardens for the uſe of the table, the ſeed-leaves being excellent among what is called *young ſallading*.

C. Bauhine calls it *Naſturtium ſylveſtre vulgatum.* Others, *Naſturtium hortenſe.*

Culture occaſions a great deal of variety in the leaves of this plant.

We ſee them ſometimes curled in a very beautiful manner at the ſides, and ſometimes undivided and broad, without ſo much as indentings at the edges. Under theſe appearances it has been deſcribed by ſome as two diſtinct ſpecies, but they are only varieties.

The plant is of the nature of the ſeveral *wild creſſes*, and is no way to be taken more properly than as a ſallad.

GENUS XII.

TREACLE MUSTARD.

THLASPI.

THE flower is compoſed of four petals placed croſs-ways: they are ſmall, and of an inverted oval form, with very narrow bottoms. The cup is formed of four little leaves, which ſtand ſomewhat open: they are oval and hollow, and fall with the flower. The ſeed-veſſel is broad, ſhort, and compreſſed; it is narrow at the baſe, and broadeſt at the extremity: the ſeeds are numerous.

Linnæus places this among the *tetradynamia ſiliculoſa*; the flower having four longer and two ſhorter threads, and the ſeed-veſſel being a regular ſilicule.

He joins the ſhepherds purſe to this genus, but without reaſon. The ſeed-veſſel in that plant is of a very particular form; therefore we have ſeparated it, and deſcribed it in its place: and we have here joined ſeveral proper *thlaſpi* to the reſt, which Linnæus ſeparates under various names.

DIVISION I. BRITISH SPECIES.

1. Common Thlaſpi.

Thlaſpi incanum majus.

The root is long, ſlender, white, and furniſhed with numerous fibres.

The firſt leaves are few, and quickly fade: they are long, narrow, and ſharp-pointed, of a pale green, a little hairy, and ſupported on long, ſlender footſtalks.

The ſtalk grows in the centre of theſe, and they grow yellow, and decay as it riſes in height: it is firm, round, of a pale green, and a little hairy, and toward the top divides into ſeveral branches.

The leaves on it are long, narrow, and ſharp-pointed: they are broadeſt at the baſe, and there adhere to the ſtalk with a kind of appendage or point on each ſide; and from this part they grow ſmaller all the way to the end.

The flowers are little and white: they ſtand in ſmall tufts at the tops of the branches, and the ſeed-veſſels appear in them as ſoon as they are open.

Theſe are ſhort, and of a pale green: the ſeeds are brown and minute.

It is common in corn-fields in many parts of England, and flowers in Auguſt.

C. Bauhine calls it *Thlaſpi arvenſe vaccariæ incano folio majus.* Others, *Thlaſpi vulgare*, and *Thlaſpi vulgatiſſimum.*

The ſeed has been celebrated for many virtues, but it is not regarded in the modern practice. It is an attenuant, and works by urine. The ancients have written great things in praiſe of it as a cure for the ſciatica; and there was at one time an opinion of its being very excellent againſt venomous bites and poiſons.

This obtained it a place in ſome of the celebrated old compoſitions; but theſe are very ill eſtabliſhed qualities.

2. Thlaſpi with hairy pods.

Thlaſpi villoſum capſulis birſutis.

The root is long, ſlender, and furniſhed with a few fibres.

The firſt leaves are ſupported on ſlender, hairy footſtalks; and are themſelves alſo hairy, and of an oval figure.

The ſtalk riſes in the centre of a tuft of theſe, and is round, firm, upright, not at all branched, and a foot or more in height.

The leaves on it are unlike thoſe at the root: they are broad, oblong, and ſomewhat heart-faſhioned at the baſe, where they ſurround the ſtalk; and thence they grow narrower to the end.

The flowers ſtand in pretty large tufts at the tops of the ſtalks, and they are large and white.

The ſeed-veſſel is ſhort and hairy, and the ſeeds are yellowiſh.

It is common on the Welch mountains, and in ſome parts of the weſt of England. It flowers in Auguſt.

C. Bauhine calls it *Thlaſpi villoſum capſulis birſutis.* Others, *Thlaſpi majus perenne.* The whole plant is conſiderably hairy from bottom to top.

3. Broad-podded Thlaſpi.

Thlaſpi ſiliculis latis.

The root is long, ſlender, and furniſhed with a few fibres.

The firſt leaves are oblong, moderately broad, and of a faint green: they are obtuſe at the ends, and a little waved at the edges.

The ſtalk riſes among theſe, and they ſoon after fade: this is round, firm, upright, branched, and about ten inches high.

The leaves are placed alternately upon it, and reſemble thoſe from the root; they are oblong, broad, and blunt at the end, of a pale green, a little notched at the edges, and without footſtalks.

The flowers are ſmall and white: they ſtand ten or a dozen together at the tops of the ſtalks.

The ſeed-veſſel is very broad and thin, and has a deep nip at the edge: the ſeeds are ſmall and yellowiſh.

It is frequent about corn-fields, and in waſte grounds, in many parts of England. It flowers in July.

C. Bauhine calls it *Thlaſpi arvenſe ſiliquis latis.* Others, *Thlaſpi Dioſcoridis.* From the breadth of the ſeed-veſſels, ſuppoſed to repreſent a piece of money, it has obtained the Engliſh name of *Pennycreſs.*

The ſeeds of this ſpecies are celebrated by the old Greek writers in rheumatic caſes, in obſtructions of the viſcera, and againſt poiſon; but theſe virtues they attributed in the ſame manner to many others upon little foundation, either in reaſon or correct experience.

4. Little oval-leaved Thlaſpi.

Thlaſpi foliis ovatis minus.

The root is ſlender, and creeps under the ſurface, ſending out in different places many fibres.

The firſt leaves riſe in a thick tuft: they are ſupported on ſlender footſtalks, and are of an oval figure, and pale green.

The ſtalks riſe in the midſt; and are round, upright, firm, and rarely branched; of a duſky colour, and about eight inches high; often much leſs.

The leaves on theſe are ſhort and ſmall, broad at the baſe, where they adhere to the ſtalk without any pedicles; and thence gradually ſmaller to a point.

The flowers are ſmall and white: they ſtand at the tops of the ſtalks in ſmall tufts.

The ſeed-veſſels are ſhort, and have this point in the middle longer than in moſt kinds: the ſeeds are numerous, little, and brown.

It is not common any where, but more frequent in Yorkſhire than any other part of England.

C. Bauhine calls it *Thlaſpi montanum glaſtifolio minus.* J. Bauhine, *Thlaſpi foliis globulariæ.* Others, *Thlaſpi bellidis folio.*

5. Smooth, broad-leaved Thlaſpi.

Thlaſpi foliis latioribus glabrum.

The root is long, ſlender, and furniſhed with numerous fibres.

The firſt leaves are oblong, broad, and obtuſe at the end, not at all indented at the edges, perfectly ſmooth, and of a pale green.

The ſtalk riſes in the centre, and theſe ſoon after grow yellow and decay: it is firm, upright, branched, and a foot and a half high.

The leaves are oblong, and conſiderably broad: they have no footſtalks, and they are of a pale green, perfectly ſmooth, and not indented at the edges.

The flowers grow at the tops of the branches, and are ſucceeded by ſmall ſmooth ſeed-veſſels.

The ſeeds are roundiſh, and of a gloſſy brown.

It is found in Suffolk, and in ſome other parts of England, and flowers in Auguſt.

Ray calls it *Thlaſpi vaccariæ folio glabrum.* It is one of the plants of late years diſcovered by the botaniſts of our country, and not known to the earlier authors.

6. Small

6. Small perfoliate Thlaſpi.

Thlaſpi perfoliatum minus.

The root is a ſmall, white fibre, divided at the end into a few minute threads.

The firſt leaves are oblong, broad, and rounded at the ends: they are not indented at the edges, and they have no footſtalks: they are of a deep duſky green, which they uſually retain to the laſt; and they remain with the plant in its growth; not, as the others, fade when the ſtalk riſes. This may probably be owing to the ſmallneſs of the plant, which draws too little nouriſhment to exhauſt them.

The ſtalk is ſlender, weak, of a pale colour, not at all branched, and about four inches high.

There uſually are three or four leaves on it, rarely more: theſe are broad, ſhort, oval, and ſharp-pointed; and they ſo perfectly ſurround the ſtalk at the baſe, that it ſeems to run through them: they are of a pale green, and not ſerrated.

The flowers are ſmall and white: they ſtand in little cluſters at the tops of the ſtalks, and ſoon fade.

The ſeed-veſſels are broad, ſhort, and flatted: the ſeeds are ſmall and brown.

It is found in barren ſtony places in many parts of England, and flowers in July.

C. Bauhine calls it *Thlaſpi perfoliatum minus*; a name copied by moſt ſince his time. Others, *Thlaſpi minus*, and *Thlaſpi minus Cluſii*.

All the ſpecies of *thlaſpi* agree in their qualities with the firſt deſcribed kind; but that is ſuppoſed to poſſeſs them in the moſt powerful degree. The ſeeds are the part that contain their virtues in the greateſt perfection, and they ſhould be uſed freſh.

DIVISION II. FOREIGN SPECIES.

1. The greater perfoliate Thlaſpi.

Thlaſpi perfoliatum majus.

The root is long, thick, and hung with many fibres.

The firſt leaves grow in a ſmall cluſter, and are oblong, broad, and ſerrated: they have very ſhort footſtalks: their colour is a deep green, and they are ſharp-pointed.

The ſtalks are numerous, round, upright, rarely at all branched, and ten inches high.

The leaves on theſe are placed at diſtances, and are of a heart-like ſhape: they have no footſtalks, and they are of a pale greyiſh green: they are broadeſt at the baſe, where they incloſe the ſtalk, but do not join behind it; and they are ſharply ſerrated on both ſides, as they decreaſe in breadth, to the extremity, where they terminate in a point.

The flowers ſtand at the tops of the ſtalks, and are ſmall and white.

The ſeed-veſſels are ſmall, and divided at the end pretty deeply.

The ſeeds are ſmall and brown.

It is a native of the ſouth of France, and flowers in July.

C. Bauhine calls it *Thlaſpi perfoliatum majus.*

2. Heart-podded Thlaſpi.

Thlaſpi ſiliculis cordatis foliis integris.

The root is ſmall, oblong, and furniſhed with a few fibres.

The firſt leaves are ſmall, and quickly fade: they are oblong, and moderately broad: they riſe from the root without any footſtalks; and they are of a pale green, undivided at the edges, and obtuſe at the end.

This ſtalk riſes in the midſt, and is round and firm, of a pale green, not at all branched, and four or five inches high.

The leaves on it are like thoſe from the root, oblong and broad, and undivided at the edges: they adhere to the ſtalk without any footſtalks, and are obtuſe at the ends.

The flowers are few and ſmall: they are white, and they are placed at the top of the ſtalk; but they quickly fall off: the pods are heart-faſhioned, and have a point in the center of the diviſion.

The ſeeds are ſmall and brown.

It is a native of Spain, and flowers in May.

C. Bauhine calls it *Thlaſpi capſula cordata peregrinum.* Others, *Thlaſpi cordatum.*

3. Garlic Thlaſpi.

Thlaſpi foliis obtuſis dentatis allium redolens.

The root is long and thick, and is furniſhed with a few ſtraggling fibres.

The firſt leaves riſe in a large tuft, and are ſupported on long, ſlender footſtalks: they are ſhort and broad, of an oval figure, and of a pale green; and they are rounded at the ends, and dentated at the edges.

The ſtalks are numerous, round, whitiſh, and irregular: they are not much branched, frequently not at all, and they are not perfectly upright.

The leaves on theſe are of the ſame figure with thoſe from the root, ſhort, oval, obtuſe at the end, dentated a little, or rather waved at the edges, and placed on footſtalks toward the lower part, but without any at the upper.

The flowers are larger than in moſt of theſe kinds, and white: they ſtand in a ſpike at the top of the ſtalk.

The ſeed-veſſels are of an oval figure, very little compreſſed, dented at the end, and full of ſmall brown ſeeds.

It is common in the ſouth of France, and flowers in Auguſt.

The whole plant has a ſtrong ſmell of garlic.

C. Bauhine calls it *Scorodo thlaſpi minus Aldrovandi.* Others, *Thlaſpi allium redolens.*

4. Little red-flowered Thlaſpi.

Thlaſpi foliis carnoſis floribus rubris.

The root is long, thick, and furniſhed with many fibres.

The

The firſt leaves are ſmall, but they ſpread themſelves in a regular cluſter upon the ground: they are oblong, narrow, and of a pale green; and they are of a fleſhy ſubſtance, and have no footſtalks.

The ſtalks are weak, ſlender, and ſcarce able to ſupport themſelves: they are uſually of a rediſh colour toward the top; and in the lower part, and ſometimes nearly all the way up, they are ſo cloſe covered with leaves, that they are ſcarce to be ſeen.

Theſe leaves are ſhort, and of an oval figure: they are very ſmall, and they ſtand cloſe over one another: they are naturally of a pale green, but they often become red.

The flowers ſtand at the tops of the ſtalks, and are moderately large, and of a pale purple, ſtreaked with a deeper red.

The ſeed-veſſels are oblong and thick: the ſeeds are very ſmall, numerous, and brown.

It is common in the ſouth of France, and in Italy, and other warm parts of Europe, and is moſt frequently ſeen in rocky, hilly places.

C. Bauhine calls it *Thlaſpi parvum ſaxatile flore rubente.* Others, *Lithonthlaſpi carnoſo folio.*

5. Great Candy-Tuft.

Thlaſpi umbellatum Creticum majus.

The root is long, ſlender, and furniſhed with numerous fibres.

The firſt leaves riſe in little tufts: they are oblong, moderately broad, ſerrated at the edges, and ſharp-pointed: they have no footſtalks, but riſe from the root with a long narrow baſe, and they are of a pale green colour.

The ſtalk grows in the centre of theſe, and is round, firm, upright, and of a pale green: it riſes to a foot or more in height, and is very much branched.

The leaves that grow on the lower part of the ſtalk reſemble thoſe from the root; but thoſe on the upper part of it are narrow, long, and not at all divided at the edges.

The flowers ſtand at the tops of the ſtalks and branches; and are white, or of a pale fleſh colour, or of a deep or purpliſh tinge; for all theſe are only accidental varieties in colour, while the plant is the ſame in every other reſpect.

The ſeed-veſſels are oblong and thick: the ſeeds are numerous and ſmall.

It is common in Italy, and in the Greek iſlands, particularly Crete.

C. Bauhine calls it *Thlaſpi umbellatum Creticum iberidis folio.* Others, *Thlaſpi Candiæ.* We have it in our gardens as an ornament to borders, and call it *Great candy tuft.*

6. Little Candy Tuft.

Thlaſpi umbellatum Creticum minus.

The root is long, ſlender, and furniſhed with a few fibres.

The firſt leaves are oblong, narrow, and of a pale green: they have no footſtalks, but run up with a ſmall baſe, and they are a little ſerrated at the extremity.

The ſtalk is round, thick, of a pale green, vaſtly ſpread out into branches, and about eight inches high.

The leaves upon this all the way up are like thoſe from the root: they are long, narrow, and ſerrated juſt about the tip, but in no other part.

The flowers grow on the tops of the branches in a kind of umbells; and are ſmall, white, or rediſh, and ſweet-ſcented.

The ſeed-veſſels are oblong, and the ſeeds are numerous, ſmall, and brown.

It is a native of the Greek iſlands, and of many other warm countries, and flowers in July.

C. Bauhine calls it *Thlaſpi umbellatum Creticum flore albo odoro minus.*

Some prefer this to the larger kind in gardens.

7. The Roſe of Jericho.

Thlaſpi fruticoſum parvum floribus albo virentibus.

The root is long, ſlender, and woody, and is hung with a few ſtraggling fibres.

The firſt leaves are few, and they very quickly wither: they are oblong, ſomewhat broad, and of a faint green, obtuſe at the ends, and indented bluntly and ſlightly at the edges.

The ſtalks are numerous, thick, woody, and divided into many branches: they ſpread themſelves circularly on the ground, and riſe only a little from it at the points of the branches: they are two or three inches in length; ſo that when they lie expanded, the plant forms a circular tuft of about half a foot.

The leaves ſtand irregularly on theſe, and thoſe toward the lower part of the ſtalk are like the firſt from the root, broad, oblong, and indented at the edges.

The flowers are ſmall, and of a greeniſh white: they ſtand on ſhort footſtalks in the diviſions of the branches.

The ſeed-veſſels are ſmall and ſhort: the ſeeds are ſmall and brown.

It is a native of the Eaſt, and flowers in July. After this the leaves fall off, and the ſtalks bend inwards till their tops meet; and the whole plant then forms a round lump of the bigneſs of a man's fiſt, and of a woody ſubſtance.

In this ſtate it is brought over frequently as a curioſity, and, if laid into a baſon of warm water, it will expand the branches, and ſpread itſelf out as it grew at firſt.

C. Bauhine calls it *Thlaſpi roſa Hierachuntea vulgo dicta.* Others, *Roſa Hierachontea.*

The reaſon of its being called a *roſe*, is its being of the ſize, and rudely reſembling the form of one in its dry ſtate.

8. The Candy Tuft Tree.

Thlaſpi ſempervirens floribus umbellatis.

The root is thick and ſpreading; and is furniſhed with many fibres.

The ſtem is hard, woody, and covered with a brown bark: it does not grow to any great height, but is divided into a number of branches.

The leaves grow on theſe in an irregular cluſtered manner, great part of the ſtalk being bare, and large tufts growing in other places; ſometimes from the body of the branches, ſometimes ſupported on a kind of footſtalks. Each leaf is oblong, narrow, and obtuſe, not at all indented, and of a freſh green.

Common Thlaspi

Thlaspi with hairy Pods

Broad Podded Thlaspi

Little Oval Leaved Thlaspi

Small Pellucid Thlaspi

The Greater Perfoliate Thlaspi

Heart Podded Thlaspi

Garlick Thlaspi

Little Red flowerd Thlaspi

Great Candy Tuft

Little Candy Tuft

Rose of Jerico

Soft Leaved Subularia

Yellow Alyssum with Swolen Pods

The Alyssum of the Antients

The Candy Tuft Tree

Hoary Clypeola

Long Leaved Clypeola

Buckler Thlaspi

The flowers grow in ſmall tufts at the extremities of the branches, and they are ſmall and white.

The ſeed-veſſels are roundiſh and flatted, and the ſeeds are brown.

It is common in the Greek iſlands, and flowers there all the year round. We have it in gardens, where it alſo continues flowering many months.

C. Bauhine calls it *Thlaſpi montanum ſempervirens.* Others, *Thlaſpi Creticum perenne flore albo.* Some, *Shrub thlaſpi.*

9. Buckler Thlaſpi.

Thlaſpi capſulis didymis.

The root is long, ſlender, and furniſhed with a few fibres.

The firſt leaves lie ſpread upon the ground in a circular tuft: they are long, narrow, and deeply indented at the edges, and are of a pale green.

The ſtalk riſes in the midſt of theſe; and is round, firm, upright, and of a whitiſh colour, a foot high, and divided into branches toward the top.

The leaves on this are few and ſmall: they are of the ſame pale green with thoſe from the root, and are lightly ſerrated at the edges, and ſharp-pointed: they have no footſtalks.

The flowers ſtand at the tops of the branches in little cluſters: they are ſmall, and of a pale yellow.

The ſeed-veſſels are very beautiful: they are thin and rounded, and they divide in an elegant manner; two ſtand together, with the ſtyle between them.

It is frequent in Germany, and ſome other parts of Europe, and flowers in July.

C. Bauhine calls it *Thlaſpi biſcutatum aſperum hieracifolium majus.* Others, *Thlaſpi clypeatum.*

GENUS XIII.

SUBULARIA.

THE flower is compoſed of four petals placed croſs-ways: they are of an inverted oval figure, and very ſmall. The cup is formed of four ſmall leaves, which ſtand wide, and are oval and hollow. The ſeed-veſſel is ſmall, and of an inverted oval figure, very little compreſſed, and divided into two parts by a membrane which goes croſs-ways: the ſeeds are very ſmall and round.

Linnæus places this among the *tetradynamia ſiliculoſa*; the flower having four longer and two ſhorter threads, and the ſeed-veſſel being a regular ſilicule.

It is a new diſcovered genus, and has never had any Engliſh name. All the known ſpecies of it are natives of Britain.

1. Soft-leaved Subularia.

Subularia foliis lævibus.

The root is a tuft of very ſlender and conſiderably long fibres.

The leaves are numerous, ſlender, and long: they reſemble ruſhes; but they are ſmall: about two inches in length, often not half ſo much, and of a pale green: they are rounded on the under part, flat on the upper, and ſharp-pointed.

The ſtalks riſe among theſe; and are naked, very ſlender, jointed, and crooked, and about four inches high: at every knee or joint there ſtands a ſingle flower; this is ſmall and white.

The ſeed-veſſel is alſo ſmall, and the ſeeds are numerous and yellowiſh.

It is found at the bottoms of deep ponds in the northern counties, and flowers under water in June and July.

Ray calls it *Subularia erecta junci foliis mollibus acutis.*

2. Subularia with long, brittle leaves.

Subularia foliis longioribus fragilibus.

The root is compoſed of numerous, long, and ſmall fibres.

The leaves are very ſlender, and ſix or eight inches long: they riſe in a conſiderable tuft; and they are round at the back, flat in the upper ſurface, and of a pale green: they are tranſparent, and appear pierced full of little holes; and they are very brittle.

The ſtalk is ſlender and round, and the flowers are placed at diſtances from the bottom to the top of it: they are ſmall and whitiſh.

It is found in the bottoms of deep ſtanding waters in Yorkſhire, and flowers in June.

Ray calls it *Subularia fragilis folio longiore et tenuiore.*

3. Firm-leaved Subularia.

Subularia foliis rigidis.

The root is compoſed of many long and thick fibres.

The leaves are oblong, ſlender, and ſharp-pointed: they ſtand upright; and are of a deep green, and are very rough and harſh to the touch: they are rounded on the back, and flat on the upper ſide; and are biggeſt at the bottom, and ſmalleſt at the extremity.

The ſtalk is upright, ſlender, and green: there are no leaves on it, but at diſtances ſingle flowers: theſe are greeniſh, and ſeldom quite open.

The ſeed-veſſel is ſmall, and the ſeeds are numerous and brown.

It is found in Yorkſhire, and other parts of the north of England, at the bottoms of fiſh-ponds, and flowers in Auguſt.

Ray calls it *Subularia vulgaris erecta folio rigidiſſimo.*

4. Creeping ſoft-leaved Subularia.

Subularia repens foliis mollioribus.

The root is compoſed of numerous fibres.

The firſt leaves riſe like a tuft of ſhort graſs,

ſtanding ſome upright, and others ſpreading out obliquely.

Among theſe riſe ſtalks, which, when they have grown to two or three inches, droop at the ends, and touching the mud, take root again, ſending up there new tufts of leaves like the firſt. By this means the plant ſpreads itſelf every way, and in a little time covers a great ſpace of the bottom.

The leaves and ſtalks are of a pale green colour, and ſoft ſubſtance: the leaves are rounded at the back, and flat at the front-ſide, and are ſtuffed with a tender pithy matter, as ruſhes are.

The ſtalks which ſupport the flowers riſe to four inches in height; and are weak, ſlender, and ſtuffed with a pith like the leaves.

The flowers are very ſmall, and of a greeniſh white.

The ſeed-veſſels are oval, and full of ſmall brown ſeeds.

It grows at the bottoms of rivers in the north of England, and flowers in July.

Ray calls it *Subularia repens folio minus rigido.*

The virtues of theſe plants are altogether unknown.

SERIES II.

Thoſe of which there is no ſpecies native of this country.

GENUS I.

ALYSSUM.

THE flower is compoſed of four petals ſpreading croſs-ways: they are ſmall, and open wide; and they have very ſhort and ſlender bottoms. The cup is oblong, and is formed of four little leaves: theſe are of an oblong oval ſhape, and obtuſe at the ends: they converge at the points, and fall with the flower. The ſeed veſſel is roundiſh, and has a ſlender point of conſiderable length riſing from its end: the ſeeds are oval and compreſſed. It is ſingular in this plant, that the two ſhorter threads in the flower are notched on the inſide toward the baſe, or have in that part a little jagg ſtanding inward.

Linnæus places this among the *tetradynamia ſiliculoſa*; the flower having four longer and two ſhorter threads, and the ſeed-veſſel being a regular ſilicule. The ſpecies of it have been treated of by ſome authors in an irregular and indeterminate manner, and many of them called by other names.

1. The Alyſſum of the Antients.

Alyſſum antiquorum.

The root is ſlender, long, and divided into fibres at the bottom.

The firſt leaves grow in an irregular manner, ſome upright, ſome leaning, and ſome lying altogether on the ground: they are long, narrow, and of a whitiſh green: they have no footſtalks, they are hairy, and they are irregularly ſinuated at the edges, and obtuſe at the ends.

The ſtalk is round, upright, not much branched, and a foot and half high.

The leaves ſtand irregularly on this, and reſemble thoſe from the root: they are oblong, narrow, hairy, and without footſtalks: they are in the ſame manner as the others, ſinuated at the edges; but they are ſharper at the point.

The flowers grow at the tops of the branches ſeveral together, and are ſmall and inconſiderable.

The ſeed-veſſels are very large and conſpicuous: they are of an oval figure, flatted, and terminated by a point, and they much reſemble the pods of honeſty, but that they are of a firmer ſubſtance, and are hairy.

The ſeeds are large and brown.

It is frequent about the vineyards of Italy, and flowers in Auguſt.

C. Bauhine calls it *Leucoium alyſſoides clypeatum majus.* Dodonæus, *Alyſſon Dioſcoridis.*

The antients celebrate this plant extremely for virtues which would be of the greateſt importance, if well eſtabliſhed. They ſay it will cure the madneſs occaſioned by the bite of a mad dog. The freſh leaves are to be bruiſed, and given for this purpoſe. They affirm, the ſame manner of giving them mixed with the food, will cure dogs that are going mad, or prevent their going ſo after the bite. This is aſſerted by authors in moſt things worthy credit; and it is worth while to try whether it be true: ſince, if it prove ſo, it will furniſh us a remedy for the moſt terrible diſorder to which human nature is ſubject, and for which (with due reſpect to the great name of Dr. Mead be it ſpoken) no cure is yet known.

Its leſſer virtues are not inconſiderable. Dioſcorides ſays it cures the hiccough immediately, and others recommend it againſt convulſions in children. The plant grows readily from ſeed with us, and it well deſerves a trial.

2. Yellow Alyſſum with ſwoln capſules.

Alyſſum flore flavo ſiliculis inflatis.

The root is long and thick, and ſpreads at the bottom into many fibres.

The firſt leaves riſe without footſtalks, and ſtand in a little tuft: they are oblong, narrow, and of a duſky green, not at all indented at the edges, but ſharp-pointed.

The ſtalk is round, upright, and branched, and is a foot and a half high.

The leaves on this reſemble thoſe from the root, but they are ſmaller: they have no footſtalks; they are not at all dented at the edges, and they grow in little cluſters from certain parts of the ſtalks, leaving large naked ſpaces between.

The flowers ſtand toward the tops; and they are large, and of a bright yellow: they are ſupported ſingly on long footſtalks.

The ſeed-veſſel is large, of an oval inverted figure, and not at all compreſſed, but on the contrary ſwelled out: the ſeeds are large and brown.

It is a native of the Greek iſlands, and flowers in May.

Alpinus calls it *Leucoium luteum utriculato ſemine.*

3. Shrubby, prickly Alyſſum.

Alyſſum ſpinoſum fruticoſum.

The root is thick and ſpreading.

The ſtalk is firm, woody, brown, and divided into many branches.

The leaves grow on theſe in little cluſters, two, three, or four together; and are ſmall, narrow, and oblong: they have no footſtalks; they are not at all dented at the edges, and they are of a deep green. Among theſe there are diſperſed a great many ſharp and long thorns from the old ſtalks.

The flowers are ſmall, and of a greeniſh white: they ſtand in cluſters at the tops of the branches.

The ſeed-veſſels are ſmall, and of a rounded ſhape; and each is terminated by a long point.

The ſeeds are ſmall and brown.

It is a native of Spain, and of other warm parts of Europe. It flowers in July.

C. Bauhine calls it *Thlaſpi fruticoſum ſpinoſum.* Others, *Thlaſpi ſpinoſum Hiſpanicum*; and others, *Leucoium ſpinoſum.*

GENUS II.

CLYPEOLA.

THE flower is compoſed of four petals expanded croſs-ways: they are oblong and undivided, and have narrow bottoms longer than the cup. The cup is formed of four oblong leaves, which do not fall off with the flower, but remain with the ſeed-veſſel. The ſeed-veſſel is rounded, compreſſed, and dented at the extremity: the ſeeds are ſmall and round.

Linnæus places this among the *tetradynamia ſiliculoſa*; the flower having four longer and two ſhorter threads, and the ſeed-veſſel being a regular ſilicule.

1. Hoary Clypeola.

Clypeola caneſcens.

The root is long, ſlender, white, and furniſhed with a few fibres.

The firſt leaves are very ſmall, and they quickly fade: they are ſhort, broadeſt in the middle, and pointed at the end; and they are of a greyiſh green, and hoary.

The ſtalks riſe in the centre of this little tuft, and uſually there are ſeveral together: theſe partly lean toward the ground, partly ſtand upright; and they are of a whitiſh colour, and about five inches high.

The leaves are very ſmall, and have no footſtalks: they are of a whitiſh colour, and are not at all indented at the edges, but pointed at the ends.

The flowers ſtand at the tops of the ſtalks, and are very ſmall and yellow.

The ſeed-veſſels are round; and they alſo ſtand in little cluſters, and make a ſingular and very pretty appearance: the ſeeds are ſmall and brown.

It is common on barren grounds in the warmer parts of Europe, and flowers in June.

C. Bauhine calls it *Thlaſpi clypeatum ſerpylli folio.* Columna, *Ionthlaſpi minimum lunatum.*

2. Long-leaved Clypeola.

Clypeola foliis longioribus acutis.

The root is long and thick, and has a few fibres.

The firſt leaves are numerous, and have no footſtalks: they are oblong, narrow, and ſharp-pointed, not at all indented, and of a pale green, and ſomewhat hoary.

The ſtalks are firm, round, of a rediſh colour, not branched, and eight or ten inches high.

The leaves on theſe are numerous, and placed irregularly: they are long, narrow, ſharp-pointed, and of a greyiſh green, ſoft to the touch, and a little hairy.

The flowers ſtand at the tops of the ſtalks, and are large and white.

The ſeed-veſſels are roundiſh, but ſomewhat approaching to oval: the ſeeds are ſmall and blackiſh.

It is frequent on the ſea-coaſts in the warmer parts of Europe, and flowers in July.

C. Bauhine calls it *Thlaſpi alyſſum dictum maritimum.* Tabernamontanus, *Thlaſpi narbonenſe centunculi anguſtofolio.*

The virtues of theſe plants are unknown.

The END of the SIXTEENTH CLASS.

THE

THE

BRITISH HERBAL.

CLASS XVII.

Plants which have the flower compoſed of FOUR PETALS, *placed one upward, two ſideways, and one downward; and the ſeed-veſſel long, and formed of two ſides, united by a ſtrait ſuture above, and another below, containing ſeveral* ROUND SEEDS.

THESE are the plants which botanic authors call *papilionaceous* and *leguminous*. The firſt term refers to the flower, the other to the ſeed-veſſel.

The flower is called *papilionaceous*, becauſe it is ſuppoſed to repreſent a butterfly *(papilio)*, or other ſuch winged inſect, in the ſtate of flying.

The fruit is called *leguminous*, from the Latin word *legumen*, ſignifying a ſeed-veſſel of this kind, and no other.

We are unhappy in the Engliſh language, that we have no particular name or term for this ſeed-veſſel, which, according to the deſcription we have given of it, is as diſtinct from all others as that of the former claſs. We have lamented the want of a term to diſtinguiſh between the *ſiliqua* and *ſilicula* in the two preceding claſſes; and we are as much at a loſs here, the ſame Engliſh word *pod* being the only name we have for all of them.

As there is a commonly known Latin name, it will be uſeful to introduce it, and call this ſeed-veſſel a *legume*.

This is a claſs plainly of Nature's forming, and the plants belonging to it are by the ſtructure of the flower and ſeed-veſſel perfectly diſtinguiſhed from all others: ſo that nothing but blindneſs to the moſt obvious characters of Nature, or an obſtinacy ſuperior to all reaſon, could induce authors to place any other plants among theſe, or to ſeparate any of theſe into other claſſes. Yet inſtances of ſuch blindneſs and ſuch obſtinacy are not wanting among theſe men of ſcience, as will be ſeen in the deſcriptions of the ſeveral genera. Indeed there ſeems no error too abſurd for ſome, and I am ſorry to ſay ſome of name in this ſtudy, to have committed.

Linnæus keeps theſe plants together: for Nature, in whatever manner ſhe is followed, will direct that; and he has followed her, though oddly: but chuſing to eſtabliſh the character of the claſs, not upon this plain and obvious ſtructure of the flower and ſeed-veſſel, but on the peculiar arrangement of the threads in the flower, he has introduced among theſe ſome which do not belong to them. This is the conſequence of his attachment to the leſſer parts of flowers inſtead of the greater; and this has led him here, as elſewhere, to contradict in many particular articles the abſolute eſtabliſhed characters in his diſtribution. Species thus frequently contradict the characters of their genus, and genera thoſe of their claſs. In Nature there is nothing of this: there all is conſtant, uniform, and regular. It is therefore unhappy for thoſe who have a deſire to underſtand the ſcience, that the ſyſtem faſhion now recommends to their uſe, directs them, inſtead of regarding the large and conſpicuous parts of flowers, to examine for diſtinctions of genera, and even of claſſes, the leſſer and more obſcure; and by that perplexed courſe carry themſelves out of the plain road of Nature, into uncertainty and innumerable contradictions.

In the preſent inſtance, the great inventor of this modern ſyſtem allows, that the firſt character of the claſs is, to have four petals in the flower, enumerating the diſtinct names by which they are called; yet the very firſt genus he introduces is *Fumaria*, which has but one.

In the ſame manner the *polygala*, which by no means belongs to the *leguminous* claſs, is brought into it by this author. His *Heiſteria* alſo has a flower formed of a ſingle petal, and yet it is introduced among theſe; the firſt character of which is to have four: and the ſame objection lies againſt his *amorpha*.

amorpha. The *borbonia* and *pſoralia* alſo have flowers compoſed of five petals, though of the papilionaceous form; and theſe he introduces among the papilionaceous and leguminous plants. This is the conſequence of his eſtabliſhing the characters of the claſs upon the peculiar diſpoſition of the threads in the flower; and this confuſion being the reſult of that character, ſhews it to be falſe. Nature has pointed out a much plainer, which we have taken, and which never fails.

Linnæus calls theſe plants *diadelphia*, becauſe the ſeveral threads in the flower grow together in two ſeparate aſſortments.

This is the account of his claſſical character: but with reſpect to the proper diſtinction, eſtabliſhed on the number, place, and form of the four petals in the flower, and the ſtructure of the ſeed veſſel, more is to be obſerved.

The flower of all plants properly of this claſs, is formed, as we have obſerved, of four petals; and theſe have diſtinct names, which it is needful the ſtudent eſtabliſh well in his memory, not only for underſtanding what has been written concerning them, but that he may be able to ſpeak properly of the flower of each. This muſt be deſcribed on moſt occaſions by theſe its parts; and they are thus named.

The upper petal is called *vexillum*. This is larger than the reſt: it riſes above the others, and in a manner covers them. It is inſerted into the upper edge of the receptacle, and its form is roundiſh or oblong. It has a kind of ridge or fold in the middle of the upper part, as if riſing from ſome preſſure below; and in the lower it falls over the reſt in a rounded hollow ſhape. At the ſides there are two prominent parts formed by two hollows behind, which fall upon, and in ſome degree preſs the two ſides.

The two ſide-petals are called *alæ*. Theſe are placed under the vexillum, and on each ſide of the flower: they are a regular pair, anſwering exactly in ſhape, ſize, and ſituation to one another. Theſe are of an oblong form, and are divided each at the baſe: the upper part of this diviſion is ſhort and inconſiderable, but the lower is very long and ſlender; and it lies along the cup, which it equals in length; and is infixed to the receptacle.

The lower petal is called the *carina*: this is hollow, compreſſed, and in ſome degree of the ſhape of a boat: it is placed under the vexillum, and between the *alæ*. This petal is ſplit like the alæ at the baſe, and its lower part runs out in the ſame manner into a long ſlip, which goes to the receptacle, and is there inſerted. The upper part is interwoven with the upper diviſion of the two alæ.

If the ſtudent in this pleaſing ſcience will lay before him the freſh gathered flower of a bean, or ſome other plant of this claſs; obſerve it entire, and examine it when taken to pieces, as he here reads the deſcription of the whole, and of its ſeveral parts, he will fix upon his mind in a very familiar and laſting manner the ſtructure of a papilionaceous flower.

The threads from whence Linnæus forms the character of his claſs are diſpoſed in this manner They do not run free, and ſeparate, as on other occaſions, the length of the flower; but join themſelves together, and form, not one, but two diſtinct and ſeparate aſſortments. Of theſe the lower, which is formed of the bodies of nine of the threads, is a thin membrane, ſurrounding in great part the rudiment of the fruit; and the upper one, which is formed of the body of only a ſingle one, lies upon it. The nine tops of the threads at the extremity of this body turn up, and imitate the form of the carina of the flower, in which they are encloſed. This body formed of the nine threads has a ſlit or opening at its top; and the ſingle thread, which lies above, fills up or covers this opening. This has its button at the extremity, and the nine points of the under body have alſo each its button; ſo that the whole number is ten.

Such is the ſtructure of this part of the papilionaceous flower; and thus Linnæus has himſelf eſtabliſhed it, when he explains it as the claſſical character: yet, in his diſtribution of the genera under it, he introduces plants which have only ſix of theſe points of threads, or buttons, and others which have eight. Theſe therefore contradict the very eſſential character of his claſs, as himſelf has explained it. They are the ſame genera in which the flower is formed of a ſingle leaf: they are not properly plants of this claſs, and ſhould not have been introduced into it.

The carina, which is naturally and uſually an entire, ſingle petal, is ſometimes ſplit in the lower part; and the fiſſure in ſome ſpecies is continued almoſt to the tip, in ſome entirely; but the appearance is the ſame.

The cup in this claſs is univerſally of one ſtructure in the manner of the flower: it is cylindric, hollow, and large at the baſe, and is divided into five ſegments at the edge; the under one of which is quite unlike the reſt, and longer than any. The upper pair are ſhorter than the others, and ſtand opener; the other pair are longer and cloſer.

The regularity and uniformity in Nature in plants truly and properly of the ſame claſs, is in no inſtance ſeen ſo clearly as in this. Theſe are very numerous; yet they all agree in theſe ſingular characters.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are found naturally wild in this country.

GENUS I.

PEA.

PISUM.

THE flower is papilionaceous, and conſiſts of four petals: the vexillum is very broad, and is nipp'd at the top with a point, and turned back: the alæ are ſhorter than the vexillum, of a roundiſh figure, and convergent; and the carina is compreſſed, ſhorter than the alæ, and of the form of a half moon. The cup is formed of a ſingle piece, divided at the rim into five ſegments; of which the two upper ones are broadeſt; and it remains with the pod. This is a large and long legume, ſomewhat depreſſed on the back; and it contains ſeveral round ſeeds.

The terms uſed in the character of this and the flowers of the ſucceeding genera, will be familiarly underſtood from the deſcription of the flower ſubjoined for that purpoſe to the claſſical character.

DIVISION I. BRITISH SPECIES.

Sea-Pea.

Piſum multiflorum caule angulato maritimum.

The root is long and ſpreading, and penetrates to a great depth: it often runs to five, ſix, or more feet in length ſeveral ways at once; and is of a whitiſh colour, and ſweet taſte.

The ſtalk is ſlender, weak, angulated, and of a pale green: it uſually lies upon the ground, and will grow ſo to a yard in length.

The leaves are beautifully pinnated: each conſiſts of four or five pairs of oval pinnæ, and is terminated with a branched tendril inſtead of an odd leaf: and at the baſe of the rib on the mainſtalk there grow a pair of larger leaves, oblong, and pointed at the ends.

The flowers grow in cluſters, eight or ten together, at the extremities of the ſtalks, and on naked footſtalks riſing from the boſoms of the leaves: they are ſmaller than the flowers of the *common pea*; and are of a pale red, with a tinge of bluiſh purple in the middle.

The pods are like thoſe of the *common pea*, but ſmaller; and each contains eight or ten ſeeds, like *common peas* alſo, but leſs.

It is a native of our ſea-coaſts, and flowers in Auguſt.

Moriſon calls it *Piſum ſpontaneum perenne repens humile*. Ray, *Piſum marinum*.

The peaſe of this are as wholeſome as thoſe of the common kind, and are often eaten by the poor people in places where they grow in plenty.

This plant had covered the ſhores of Suffolk unobſerved many ages, when, about the preſent ſeaſon two hundred years ago, neceſſity firſt ſhewed them to our countrymen.

The perſecutions and barbarities of that horrible period, under the auſpices of Mary, were attended with a year of dearth. While the clergy, under a cruel woman, were reviving ill-made laws, and putting what conſtruction they pleaſed upon the ſtatutes of Richards and of Henrys made under very different circumſtances; the poor, who were ſacrificed as hereticks in ſome places, were periſhing in others by famine.

Suffolk lay waſte more than any other county, and the ſea-coaſt inhabitants were moſt neceſſitated of all. Hunger ſhewed them what they had neglected in their days of plenty; and they were ſupported by thouſands upon the fruit of this *ſea-pea*, then ripening in a prodigious abundance.

The enthuſiaſts of that time ſuppoſed the plants raiſed by miracle; and our venerable Cambden, unwilling to call in ſupernatural powers, ſolves the difficulty, by imagining they roſe from peaſe thrown on the ſhore from ſome wrecked veſſel. But there needs not even this far-fetched thought: they were not produced that year; but they had been diſregarded before. They will grow any where on the moſt barren beach, penetrating by thoſe long roots to the better ſoil.

This is properly the *wild Engliſh pea*. We have obſerved before, that we have in the ſame manner a wild Engliſh cabbage, whoſe place of growth is alſo on the ſea coaſt; but neither of theſe is the ſource of all the cultivated kinds.

There is an inſuperable toughneſs in the ſea-cabbage; and there is a bitterneſs in theſe *peas*; which, though hunger can paſs over in coarſe mouths, no culture can mend.

DIVI-

DIVISION II. FOREIGN SPECIES.

1. The Common Pea.
Piſum ſativum.

The root is compoſed of ſeveral long ſtraggling fibres.

The ſtalk is weak, ſlender, branched, and of a pale green: it uſually lays hold of ſticks, or any thing that can ſupport it, and will thus grow to more than a yard in height: when left unſupported, it trails upon the ground, and is lower.

The leaves are regularly pinnated: each is compoſed of two or three pairs of pinnæ, which are roundiſh, approaching to oval, of a tender ſubſtance, and of a greyiſh green colour.

The rib on which theſe ſtand is terminated by a tendril, inſtead of an odd leaf; and at the baſe, where it joins the ſtalk, there is a ſingle broad leaf.

The flowers ſtand on long footſtalks, and are white, with a ſpot of purple in the middle.

The pods are long and thick, and contain ſix, eight, or ten peaſe.

This is wild in the corn-fields of Italy, and flowers in June. With us it is cultivated. And Bauhine and others call it *Piſum hortenſe*.

The excellency of the ſeeds of this plant at our tables, have made the gardeners ſo induſtrious in its culture, that we ſee innumerable varieties of it, which are in their way diſtinguiſhed by particular names, and have been by ſome deſcribed as ſo many ſpecies. But they are all variations made by culture from this ſingle ſpecies.

The *field-pea*, and the *garden-pea*, are in every reſpect, but what is owing to culture, the ſame plant: and in the ſame manner the *haſtive* and the *rouncival*, with all thoſe other ſorts, the names of which are ſo numerous, and ſo continually increaſing, are to be conſidered by the botaniſts as varieties of one and the ſame original plant.

The following ſpecies is truly diſtinct.

3. Single-flowered Pea with cornered leaves.
Piſum uniflorum foliis angulatis.

The root is divided, ſpreading, fibrous, and irregular.

The ſtalks grow to three feet high when ſupported.

The leaves which ſtand on the main ſtalks, at the inſertion of the pinnated ones, are of an oblong figure, and cornered at the bottom, where they have uſually alſo two or three indentings.

The pinnated leaves conſiſt each of two or three pairs of ſmall oval pinnæ on a rib, which ariſes from the boſom of the cornered leaf, and is terminated by a divided tendril.

The flowers ſtand ſingly on long, ſlender footſtalks riſing from the boſoms of the leaves; and they are large and white, or ſometimes of a pale red, with a deep purple or blue ſpot in the center.

The pod is large, and the *pea* very ſweet to the taſte.

It is wild among the corn-fields in the warmer parts of Europe, and flowers in June.

C. Bauhine calls it *Piſum pulchrum folio anguloſo*.

The fruits of theſe ſeveral kinds are all of the ſame quality, wholeſome as food, but apt to breed wind.

GENUS II.

VETCHLING.

LATHYRUS.

THE flower is of the papilionaceous form, and is compoſed of four petals. The vexillum is very large: its ſides and top turn back, and it is nipped at the extremity in a heart-faſhioned manner. The alæ are ſhort, of the figure of a new moon, and obtuſe. The carina is of the length of the alæ, but broader, and ſplits inwards in the middle. The cup is of the bell-ſhape, and is divided into five ſegments at the edge: the two upper of theſe are ſhorter, and the ſingle lower ſegment is longer than the alæ. The pod is very long, of a cylindric figure, and compreſſed and pointed: the ſeeds are round, but a little angulated. The ſtalks are flatted, and edged with membranes; and the leaves are compoſed only of one pair of pinnæ.

Linnæus places this among the *diadelphia decandria*; the threads being in two bodies, nine in one, and one in another. But he joins with it three other genera, diſtinguiſhed very evidently by Nature. Theſe are the *aphaca*, *niſſolia*, and *clymenum*, to be deſcribed hereafter: they agree in the minute parts, by which this author formed his characters, with the *lathyrus*, but not in others.

DIVISION I. BRITISH SPECIES.

1. Great, broad-leaved Vetchling.
Lathyrus major latifolius.

The root is long, ſlender, and furniſhed with a great number of crooked, irregular fibres, penetrating a great way into the earth, and ſupporting itſelf very firmly.

The ſtalks are numerous, ſlender, and weak; and, if they meet with nothing to ſupport them, trail on the ground; but, when they have buſhes for climbing, they grow to four feet high: they are flatted, and as it were jointed.

The leaves grow two together, and are long, broad, and ribbed: there grow two ſlender membranes,

branes, or little leaves, at their inſertion on the ſtalk; and they are of a greyiſh green colour.

The tendrils for climbing riſe from the center of the two leaves, as from the end of the rib in the *pea* kind.

The flowers are large, and of a bright and beautiful red, with a deeper tinge in the middle: they are ſupported ſeveral together on long footſtalks.

The pod is long and ſlender, and the ſeeds are numerous and ſmall.

It is found in woods, principally in our northern counties, and flowers in June.

C. Bauhine calls it *Lathyrus latifolius*. Others, *Lathyrus flore rubro ſpecioſiore*. Our Engliſh writers call it *Peaſe everlaſting*: but that is a very improper name, it not being of the *pea* kind.

2. Great, narrow leaved Vetchling.

Lathyrus anguſtifolius major.

The root is compoſed of numerous, ſlender, long fibres, and takes great hold in the ground.

The ſtalks are numerous, angular, and weak: they are of a pale green, edged ſharply, and jointed; and, when they have ſupport, will riſe to four feet in height.

The leaves are placed at diſtances, and two always ſtand together at the end of a ſhort kind of rib, with a tendril between them: they are narrow, ribbed, ſharp-pointed, and of a pale green.

The flowers are ſmall, and of a mixed colour, partly white, and partly red. The red is in various degrees, and ſometimes there is ſcarce any.

The pods are thicker than in the former ſpecies, and the ſeeds are round and large.

It is found among buſhes in many parts of the kingdom, and flowers in Auguſt.

C. Bauhine calls it *Lathyrus ſylveſtris major*. J. Bauhine, *Lathyri majoris ſpecies flore rubente & albido minore Dumetorum ſive Germanicus.*

3. Yellow Vetchling.

Lathyrus ſylveſtris luteus vulgaris.

The root is long, ſlender, and full of fibres.

The ſtalk is angulated, weak, and hangs about in an irregular form, not upright, nor quite trailing on the ground: it is of a pale green, and edged.

The leaves ſtand at diſtances, and are each compoſed of a ſingle pair, ſupported on a kind of ſhort rib, and having a tendril ſhooting out from their center. At the inſertion of the rib or ſtalk which ſupports them, there are alſo a pair of ſhort leaves.

The flowers are placed on ſhort footſtalks, four or five together, riſing from the boſoms of the leaves: they are large, and of a pale yellow.

The pods are ſlender: the ſeeds are ſmall, roundiſh, and black.

It is common among our buſhes, and in paſtures, and flowers in June.

C. Bauhine calls it *Lathyrus ſylveſtris luteus foliis viciæ:* a name very inexpreſſive, for the leaves do not at all anſwer that deſcription. Others call it *Lathyrus luteus ſylveſtris.*

4. Rough-podded Vetchling.

Lathyrus ſiliqua hirſuta.

The root is compoſed of numerous, ſlender, tough, and irregular fibres.

The ſtalks are weak and angulated, and they ſupport themſelves irregularly to the height of a foot and half, or they will grow much taller when they can climb.

The leaves are narrow, hard, and ribbed: they ſtand two together, with a tendril at the end.

The flowers are ſmall, and of a mixed red and white colour: they ſtand ſeveral together on very long, ſlender footſtalks.

The pods are an inch and half long, and conſiderably broad: the ſeeds are ſmall, blackiſh, and nearly round.

It is found on the edges of ploughed fields in our midland counties, and flowers in Auguſt.

C. Bauhine calls it *Lathyrus anguſtifolius ſiliqua hirſuta.*

DIVISION II. FOREIGN SPECIES.

1. Garden Vetchling.

Lathyrus ſativus flore purpureo.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalks are numerous, thick, and ribbed, of a pale green, and very much branched: when ſupported by ſticks, they will riſe to five feet high.

The leaves are placed two together on a ribbed footſtalk, and that is terminated by a tendril, which takes its riſe between them.

There is a broad film on each ſide at the inſertion of the rib to the ſtalk.

The flowers are large and purple: they ſtand on long, ſlender footſtalks, uſually one on each, but ſometimes two.

The pod is ſhort, thick, and ribbed, and furrowed on the back: the ſeeds are very large, and roundiſh.

It is a native of the Eaſt, and is cultivated in gardens and fields in Germany, and ſome parts of Italy. It flowers in July, and the ſeeds ripen in Auguſt.

C. Bauhine calls it *Lathyrus ſativus flore purpureo.* Dodonæus, *Aracus ſive cicera.*

2. Peaſe Earthwort.

Lathyrus foliis ovatis radice tuberoſa.

The root is thick, oblong, and irregularly tuberous: frequently theſe thick knobs are near the ſurface, but at other times they are faſtened to the ends of the fibres, and lie at a great depth: they are brown on the ſurface, white within, and of a ſweet and very pleaſant taſte.

The ſtalks are edged, weak, and three or four feet long: they trail upon the ground, or ſupport themſelves among the buſhes.

The leaves grow two together, as in the others; but they are ſhort and broad, of an oval figure, and obtuſe at the ends.

The flowers grow in cluſters on long foot-ſtalks riſing from the boſoms of the leaves, and are of a bright purple.

The ſeed-veſſel is long and ſlender, and the ſeeds are numerous and roundiſh.

It is frequent among buſhes in Germany, and many other parts of Europe, where the roots are dug for the table. It flowers in July.

C. Bauhine calls it *Lathyrus arvenſis repens tuberoſus.*

5. Strip'd yellow-flowered Vetchling.

Lathyrus flore flavo ſtriato.

The root is long and thick; divided into many parts, and furniſhed with numerous irregular fibres.

The ſtalks are ſlender, weak, and flat; edged by a membrane, and of a pale green colour.

The leaves grow, as in the others, two together, with a tendril riſing from between them: they are broad, ſhort, and ſharp-pointed, and of a freſh green.

The flowers grow three or four together on ſlender footſtalks, and are of a beautiful yellow, ſtriped with purple.

The pods are long and ſlender, and the ſeeds are roundiſh and ſmall.

It is a native of Spain, and flowers in Auguſt.

Moriſon calls it *Lathyrus Bæticus flore luteo.* It is one of the moſt beautiful of the *lathyrus* kind.

4. Vetchling called Sweet Pea.

Lathyrus hirſutus magno flore.

The root is compoſed of ſeveral thick fibres, with ſmaller growing from them.

The ſtalks are flatted and weak, but conſiderably thick, and of a pale green.

The leaves are very large, and of a pale green, ſoft to the touch, and a little hairy: they grow two together, and have a tendril riſing between them.

The flowers are large, and of a mixed red, and are very ſweet-ſcented.

The ſeed-veſſel is large and hairy, and the ſeeds are roundiſh and brown.

It is a native of Africa, and flowers in July. It is kept in our gardens for its beauty and fragrance, but very improperly called a *pea.*

C. Bauhine calls it *Lathyrus ſiculus.*

5. Vetchling, called Tangier Pea.

Lathyrus biflorus floribus ruberrimis.

The root is long, divided, and furniſhed with numerous, thick, and crooked fibres.

The ſtalks are thick, but weak, and moderately branched: they are angulated, and of a pale greyiſh green.

The leaves grow, as in the others, two together, with a tendril between them: they are long, narrow, and ſharp-pointed, and are of a pale green.

The flowers grow upon very long footſtalks riſing from the boſoms of the leaves, two on each; and they are large, and of a beautiful red.

The pods are ſlender, and the ſeeds are roundiſh.

It is a native of Africa, but flowers very well in our gardens.

Moriſon calls it *Lathyrus tingitanus ſiliquis orobi flore amplo ruberrimo.* Our gardeners, *Tangier pea.*

GENUS III.

CHICHLING.

CLYMENUM.

THE flower is papilionaceous, and is compoſed of four petals. The vexillum is large, dented at the extremity, and turned back at the top and at the edges. The alæ are ſhort, hooked, and obtuſe, and the carina is broad, and ſplit in the middle. The cup is formed of a ſingle leaf, narrow at the bottom, wide at the mouth, and divided into five ſegments; the two upper ones ſhort, and the lower one very long. The pod is long, and flatted at top. The leaves grow in a pinnated manner, ſeveral pairs together.

Linnæus places this among the *diadelphia decandria*; the threads being formed into two bodies, nine into one, and a ſingle one in the other.

That author joins this genus and the lathyrus, though Nature have thus plainly diſtinguiſhed them by the compoſition of the leaves.

It is an invariable character, and can never be miſtaken. It is the more needful, as the plants of each genus are numerous; and of the more authority, as thoſe of the preſent arrangement have been generally diſtinguiſhed by this ſeparate name.

DIVISION I. BRITISH SPECIES.

1. Variegated wild Chichling.

Clymenum ſylveſtre flore variegato.

The root is long and ſlender, divided into ſeveral parts, and furniſhed with numerous, thick, and ſpreading fibres.

The ſtalk is flatted, and edged, of a pale greyiſh green, weak, and branched: it hangs irregularly, or is ſupported by the ſtouter plants or buſhes; and in this manner grows to a foot and half or more in length.

The leaves are placed irregularly, and each is

compoſed of three or four pairs of pinnæ regularly placed, with a tendril growing from the end.

The pinnæ are oblong, narrow, and ſharp-pointed, of a deep green, and not at all indented at the edges.

The flowers are placed on long, ſlender pedicles riſing from the boſoms of the leaves, ſeveral of them ſtanding in a row one over another on each pedicle; and they are large, and of a mixed colour, partly red and partly blue.

The pods are large and ſlender, and the ſeeds are roundiſh.

We have it in the neighbourhood of London, and many other places among buſhes. It flowers in July.

Ray calls it *Vicia lathyriformis, ſive vicia lathyroides noſtras.* Merret, *Lathyrus ex cæruleo & rubro mixtus.* It is the only ſpecies of *clymenum* we have wild.

DIVISION II. FOREIGN SPECIES.

Long-leaved Clymenum.

Clymenum foliis longioribus.

The root is compoſed of numerous ſlender fibres, connected to a ſmall head.

The ſtalk is weak, flatted, and of a pale green, very ſlightly edged; and, when tolerably ſupported, it will grow to four feet high.

The leaves ſtand thick upon it, and are pinnated: each is compoſed of three or four pairs of very fine, long, and narrow pinnæ; which are ſharp-pointed, not at all dentated at the edges, and of a beautiful pale green: the rib on which theſe ſtand is terminated by a long fine tendril.

The flowers grow from the boſoms of the leaves on long ſlender footſtalks; and they are large and purple.

The ſeed-veſſel is long and ſlender, and the ſeeds are roundiſh and brown.

It is a native of Italy, and flowers in July.

Moriſon calls it *Lathyrus anguſtifolius leptomacrolobus ſemine rotundo.* Others, *Clymenum Italorum.*

GENUS IV.

YELLOW VETCHLING.

APHACA.

THE flower is of the papilionaceous form, and is compoſed of four petals. The vexillum is large, nipp'd at the extremity, and turned back at the top and ſides. The alæ are ſhort, crooked, and obtuſe. The carina is broad, of a half-round ſhape, and ſplit in the middle. The cup is of a bell-like ſhape, and is divided into five irregular ſegments at the edge: the two upper ones are ſhort, and the ſingle under one is very long. The pod is oblong and rounded. The leaves are placed in pairs upon the ſtalk, and are of a three-cornered ſhape.

This is a very ſingular genus: there is but one known ſpecies of it, and that is a native of Britain. We are unhappy in wanting an Engliſh generical name for it, for that of *yellow vetchling* ſeems to refer to another genus. As I have a diſlike to inventing new names, I ſhall adviſe the ſtudent to uſe the Latin one *aphaca.*

Linnæus places this among the *diadelphia decandria*; the ſtamina being ten, and formed into parcels, nine in one, and a ſingle one in the other: but he confounds it, among ſeveral other genera, with the lathyrus. He does not allow the leaves of this plant to be properly ſuch, but only a kind of ſtipulæ, ſuch as others of the pea and lathyrus kind have upon the ſtalk, at the places where the proper leaves riſe. But this is a forced thought. The leaves are as properly and perfectly leaves as thoſe of any other plant; and their great ſingularity perfectly diſtinguiſhes the genus from all others of the papilionaceous leguminous claſs.

Yellow Vetchling.

Aphaca.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalk riſes uſually ſingle, and frequently is not at all branched: it is round, almoſt upright, and not more than a foot high.

The leaves are numerous, and they are very ſingular: they are of a triangular figure, broad, ſharp-pointed, and terminated by two points at the corners of the baſe: they ſtand two together at the joints, and are of a pale and ſomewhat yellowiſh green. From the boſoms of theſe there riſe tendrils; but the plant is low, and tolerably ſtrong; ſo that it wants them leſs than many other kinds.

The flowers are ſupported ſingly on ſlender footſtalks, and they are moderately large and yellow.

The pod is oblong, and the ſeeds are roundiſh.

It is found in many parts of England on dry hilly paſtures, and flowers in Auguſt.

C. Bauhine calls it *Vicia lutea foliis convolvoli minoris.* Others, *Aphaca.*

The ſeeds of the *aphaca* are ſaid to be uſeful againſt epileptic diſorders; but there is no good authority for crediting it.

GENUS

GENUS V.

VETCH.

VICIA.

THE flower is compoſed of four petals, and is of the papilionaceous kind. The vexillum is of an oval figure, and has a very long bottom ſurrounding the rudiment of the fruit: the top of it is nipped and pointed, the ſides turn back, and there is a line of an elevated form running down the whole length of the back of it. The alæ are oblong, ſtrait, and ſomewhat heart-faſhioned; and they have long bottoms. The carina is ſhorter than the alæ: it has alſo an oblong bottom, which is divided into two parts. The pod is long, and of a tough ſubſtance, and is terminated by a point: the ſeeds are round. The leaves are pinnated, and compoſed of numerous pairs; and they have not the bluiſh colour, which is almoſt univerſal among the pea kind, and common to moſt of the lathyri.

Linnæus places this among the *diadelphia decandria*; the threads in the flower being ten, in two aſſortments. But he joins with it the bean, among ſome other equally different plants.

In vindication of this he ſays, that, having repeatedly examined and compared the flowers of the *vetch* and *bean*, there appeared to him no eſſential difference: ſo that, upon their ſimilitude, he makes the bean a ſpecies of *vetch*, not a diſtinct genus.

That difference, which is not ſeen in the flower, is evident in the pod and ſeeds of theſe plants; and in Nature no two genera of this claſs are more perfectly ſeparated.

This author ſays, that, in the leguminous tribe, the ſhape of the fruit alone is not to determine a genus to be diſtinct. But theſe are arbitrary words. Fancy may dictate laws in this caſe, but Nature has eſtabliſhed none. It is certain that the difference of the fruit is a ſufficient mark for the diſtinction of genera among the leguminous plants; and theſe are properly ſeparate genera: it is therefore we do not include the bean among the *vetch* kind, but ſhall treat only of *vetches* properly ſo called under this head.

DIVISION I. BRITISH SPECIES.

1. The Common Tare.

Vicia vulgaris ſativa ſemine nigricante.

The root is compoſed of numerous, long, thick, and irregular fibres.

The ſtalks are numerous, round, weak, and of a pale green: they ſtand irregularly, and are ſcarce able to keep themſelves up without ſupports.

The leaves are very numerous, long, and narrow: they are pinnated, but without an odd leaf at the end, a tendril growing in its place: each is compoſed of ſix or eight pairs of pinnæ; and they are of a duſky green, and ſomewhat hairy.

The flowers ſtand in the boſoms of the leaves, uſually two together, ſupported on very ſhort footſtalks: they are large, and of a mix'd red and purple colour.

The pods are large, long, and pointed: they ſtand uſually pointing upwards: the ſeeds are numerous, round, and naturally blackiſh.

It is common wild in the corn-fields of Italy, and is in our country alſo a native, but not ſo common. I have ſeen it where there were no marks of the ſeed ever having been brought to the place, in our northern counties; and it is alſo frequent wild in Ireland.

C. Bauhine calls it *Vicia vulgaris ſativa ſemine nigro.*

He diſtinguiſhes as a diſtinct ſpecies the *vetch* with whitiſh ſeeds, and many authors follow him; but this is only a variety.

2. Great Buſh-Vetch.

Vicia pinnis ovatis floribus numeroſis.

The root is long, ſlender, and furniſhed with many thick and ſtraggling fibres.

The ſtalk is ſlender, weak, and of a pale green: it is not able to ſupport itſelf without climbing; but, when buſhes are near it, will riſe to four or five feet in height.

The leaves are numerous, and placed irregularly: they are very beautifully pinnated, each being compoſed of ſeven, eight, or more pairs of pinnæ, which are of an oval form, and freſh green colour. A tendril ſtands in the place of an odd leaf at the end of each rib.

The flowers are large, and of a beautiful bright red, ſtriped with a deeper red, or with a pale purple: they ſtand in cluſters, ſix or more together, and have ſhort footſtalks.

The pods are ſmall: they are ſhort and compreſſed; and the ſeeds are blackiſh, and nearly round.

It is common in thickets, and flowers in July.

C. Bauhine calls it *Vicia maxima Dumetorum.* Others, *Vicia ſepium perennis.* It is ſometimes ſeen with white flowers, but very rarely.

3. Great Buſh-Vetch with ſhort pinnæ.

Vicia pinnis brevioribus obtuſis floribus numeroſis.

The root is compoſed of numerous, long, thick fibres.

The ſtalk is weak, but very long: when there is a ſufficient ſupport of buſhes, it often grows to ſix feet.

The leaves are pinnated, and each has eight or more pairs: theſe are ſhort, obtuſe, and of a deep green colour.

The flowers grow in tufts with ſhort footſtalks, and are throughout of a dull purpliſh colour.

The pods are ſhort and thick; each contains about ſix ſeeds, which very much reſemble thoſe of the *common tare.*

It is found in thickets and among buſhes in our northern counties; but it is not common.

Ray

Ray calls it *Vicia folio ſubrotundo brevi obtuſo mucronato, pediculo brevi inſidente flore viciæ dumetorum.*

4. Strangle Tare.

Vicia pinnis anguſtis flore purpureo.

The root is long, ſlender, and divided, and has numerous ſtraggling fibres.

The ſtalk is weak, ſlender, and green; and, when it meets ſupport, will grow to the height of two feet, but is never much branched.

The leaves are numerous and pinnated: each is compoſed of three or four pairs of pinnæ, rarely more; and theſe are oblong, narrow, and obtuſe at the ends: they are of a duſky green colour; and at the ends, inſtead of an odd leaf, there ſtands a large divided tendril.

The flowers are ſmall, but of a lively and beautiful red, with a white ſpot in the centre: they grow uſually two together, and have ſhort foot-ſtalks in the boſoms of the leaves. When the ſoil is very rich, three will grow together; and, when it is poor, there will uſually be only one in a place; but two is the moſt frequent number.

The pods are ſlender and long, and ſtand pointing upwards: the ſeeds are eight or ten in each, and they are ſometimes greeniſh, ſometimes black, and ſometimes ſpotted.

It is common among buſhes, and in corn-fields, and flowers in July.

C. Bauhine calls it *Vicia ſemine rotundo nigro.* Others, *Aracus*, and *Cracca major.*

5. Red-flowered Vetch, with ſmall black ſeeds.

Vicia flore ruberrimo ſemine parvo nigro.

The root is compoſed of a few large fibres.

The ſtalk is ſlender, weak, and of a pale green; but, when ſupported, it grows to three feet in height.

The leaves are pinnated: each is compoſed of about four pairs of pinnæ, which are oblong, broadeſt at the baſe, and ſmall at the extremity, and of a faint green.

The flowers grow uſually two together from the boſoms of the leaves: they are large, and of an extremely bright red.

The pods are very long and ſlender; and, when they are ripe, are black: the ſeeds alſo are black: they are round, and about ten are contained in each pod.

It is not uncommon in our midland counties among hedges. It flowers in Auguſt.

C. Bauhine calls it *Vicia vulgaris acutiore folio ſemine parvo nigro.* Ray, *Vicia ſylveſtris flore ruberrimo ſiliqua longa nigra.* The flowers are ſometimes white.

6. Yellow Vetch with rough pods.

Vicia flore flavo ſiliquis hirſutis.

The root is long, thick, divided into ſeveral parts, and furniſhed with numerous fibres.

The ſtalk is round, thicker than in moſt of the *vetch* kind, and of a pale green.

The leaves ſtand irregularly on it, and they are very beautifully pinnated, each being compoſed of ten or more pairs of pinnæ: theſe are oblong, narrow, and ſharp-pointed, and of a duſky green.

The end of the rib in this, as in the other ſpecies, is furniſhed with a tendril for ſupporting the plant in the ſtead of an odd leaf.

The flowers ſtand in an irregular manner in the boſoms of the leaves, and are large, and of a pale yellow.

The pods are ſhort, thick, hairy, and placed upright: the ſeeds are few, and roundiſh.

It is found in our ſouthern counties, and flowers in July.

C. Bauhine calls it *Vicia ſylveſtris lutea ſiliqua hirſuta.*

7. Little, early, red-flowered Vetch.

Vicia præcox pumila flore rubente.

The root is compoſed of many ſlender fibres.

The ſtalk is round, weak, ſlender, of a bluiſh green; and, when ſupported, is about a foot high.

The leaves are irregularly pinnated: each is compoſed of three or four pairs of pinnæ, of which one or more are naturally wanting; and theſe are of an oblong, oval figure, and of a duſky green.

The flowers ſtand ſingly on long, ſlender foot-ſtalks, and are of a beautiful purple: they are ſmall, and but of ſhort continuance.

The pod is very ſlender, and moderately long; and the ſeeds are ſmall and angulated.

It is found in barren hilly paſtures, but not common, and flowers in April.

Ray calls it *Vicia minima præcox Pariſienſium.*

DIVISION II. FOREIGN SPECIES.

Broad podded Vetch.

Vicia pinnis anguſtis ſiliquis latis.

The root is long, ſlender, divided into a few parts, and furniſhed with ſome ſtraggling fibres.

The leaves are pinnated, and ſtand at diſtances on the ſtalk: each is compoſed of four or five pair of very narrow pinnæ, and a ſimple tendril ſtands in the place of an odd leaf at the end.

The flowers are ſmall, and of a deep purple.

The pods are ſhort, broad, and ſmooth.

It is a native of the ſouth of France, and flowers in June.

Magnol calls it *Vicia anguſtifolia purpureo violacea ſiliqua lata glabra.*

GENUS

Sea Pea

Common Pea

Single Flowerd Pea with Convolvolus Leaves

Great Broad Leaved Tetchling

Great Narrow Leaved Tetchling

Yellow Tetchling

Garden Tetchling

Pease Earthnut

Striped Yellow Flowerd Tetchling

Tetchling called Tangier Pea

Variegated Tetchling

Long-Leaved Cyprenum

Alpharea

Great Common Bushvetch Tare

Shrubby with Narrow Pale Leaves

Little Garden Flowerd Yellowish Brown Vetch

Brown Vetched Vetch

GENUS VI.

TINE TARE.

CRACCA.

THE flower is papilionaceous, and compoſed of four petals. The vexillum is of an oval form, and has a long hollowed bottom. The alæ are ſtrait, of an oblong form, a little heart-faſhioned, and ſhorter than the vexillum. The carina is flatted, and half round, and is ſmaller than the alæ. The pods are placed on very long and ſlender footſtalks; and there always grow a number of the flowers and pods together, and they hang downwards.

Linnæus places this among the *diadelphia decandria*; the threads in the flower being ten, and collected into two parcels, nine in one, and a ſingle one in the other.

This author takes the eſtabliſhed name *cracca* from this genus; and refers it to the vicia or *tare*. The flowers of theſe plants reſemble one another; but we have here ſhewn ſufficient diſtinction for a generical character; and it is extremely needful to ſeparate theſe and the *tares*, the ſpecies under each of thoſe genera being numerous, and their diſtinctions leſs obvious than in many other kinds.

DIVISION I. BRITISH SPECIES.

1. Small Tine Tare.

Cracca minor ſiliquis pluribus hirſutis.

The root is ſmall, and hung with numerous irregular fibres.

The ſtalks are numerous, weak, and of a pale green: they are not much branched, and they are hardly a foot high.

The leaves are regularly pinnated: each is compoſed of five or ſix pairs of pinnæ, which are ſhort, broad, ſharp-pointed, and of a faint green. At the end of the rib in each leaf there grows a ſmall tendril.

The flowers grow four, five, or more together, upon long and ſlender footſtalks, which riſe from the boſoms of the leaves: they are ſmall, and of a mixed blue and white colour.

The pods are broad and ſhort: they are of a pale green, ſomewhat hairy, and, when thoroughly ripe, whitiſh: the ſeeds are ſmall and round.

It is very common in corn-fields, and under hedges. It flowers in June.

C. Bauhine calls it *Vicia ſegetum cum ſiliquis plurimis hirſutis.*

2. Smooth-podded Tine Tare.

Cracca ſiliquis oblongis glabris.

The root is ſmall, oblong, divided into two or three parts, and furniſhed with ſeveral fibres.

The ſtalks are numerous, weak, branched, a foot high, and of a pale green.

The leaves are ſmall and pinnated, and they have long tendrils: each is compoſed of four or five pairs of oblong pinnæ, with the tendril at the end.

The flowers grow on long, ſlender footſtalks, two or three on each; and they are of a pale blue and white colour, and ſmall.

The pods are ſhort and ſmooth, and the ſeeds are ſmall and round.

The whole plant often lies upon the ground entangling every little herb near it.

It is common in corn-fields eſpecially where the ſoil is damp, and flowers in June.

C. Bauhine calls it *Vicia ſegetum ſiliquis ſingularibus glabris.* But in this he has named it ill: the pods are fewer than in the preceding ſpecies, but they ſeldom ſtand ſingly: two or three together is the moſt natural manner of growth.

3. Tufted Tine Tare.

Cracca multiflora ſpicata.

The root is compoſed of numerous ſmall fibres.

The ſtalk is round, weak, of a pale green, and branched.

The leaves are pinnated, long, of a pale green, and terminated by a tendril in the place of an odd leaf: each is compoſed of about eight pairs of pinnæ; and theſe are oblong, narrow, and pointed at the end.

The flowers are ſingle, and of a deep beautiful purple: they ſtand in long ſpikes, and are ſupported on long, ſlender pedicles: but they have a drooping poſition.

The pods are long and ſlender, and the ſeeds are ſmall and round.

It is common in hedges, and flowers in July.

C. Bauhine call it *Vicia multiflora*. Others, *Aracus*, and *Cracca*. We call it *Tufted vetches*; but it is not ſtrictly of the vetch kind.

4. Great tufted Tine Tare.

Cracca multiflora ſpicata maxima.

The root is long, ſlender, and furniſhed with numerous fibres.

The ſtalk is round, and of a pale whitiſh green; much thicker than in the others of this kind, but not of ſtrength to ſupport itſelf: it climbs among buſhes, and grows to five feet high.

The leaves are very beautiful: they are pinnated in a regular and elegant manner, and each has twelve or more pairs of pinnæ: theſe are of an oval form, obtuſe at the end, of a faint green, and not divided at all at the edges. A tendril terminates the rib inſtead of an odd pinna; and there generally are ſhoots for young branches all the way up the plant in their boſoms.

The flowers ſtand in long ſpikes, and are very beautiful: they are of a pale blue, ſtreaked with a very deep blue in ſtrong lines.

The pods are long and ſlender, and the ſeeds are ſmall and round.

We have this elegant plant in woods and thickets in many parts of England, though not common like the former. It flowers in Auguſt.

Ray calls it *Vicia ſylvatica multiflora maxima.*

The ſeeds of theſe are eaten by wild birds, and would ſerve as *tares*, and other of the pulſe kind, for the feeding ſome domeſtic animals: they are not cultivated for ſuch purpoſe, not becauſe they are not worthy, but becauſe others are in uſe. Many of theſe are better bearers, and would be more ſerviceable than the *common tare*, or other uſual kinds.

DIVISION II. FOREIGN SPECIES.

Thick-podded, broad-leaved Cracca.

Cracca latifolia ſiliquis craſſis.

The root is thick, long, and furniſhed with numerous fibres.

The ſtalks are many, firm, of a duſky colour, and branched.

The leaves are beautifully pinnated: they are compoſed each of eight or more pairs of pinnæ; and theſe are broad, ſhort, very obtuſe, and have a kind of thread at their end, which is a continuation of the middle rib beyond the verge of the leaf.

The whole pinnated leaf is terminated by a ſlight tendril; but this is not conſtant, nor is it ſo important to this ſhrubby kind as to thoſe which are weaker.

The flowers are ſmall and purple: they ſtand in long ſpikes, in the manner of thoſe of the common Engliſh many-flowered kind; and they have a long, general footſtalk, and each its ſhort and ſmall ſeparate one, by which it is connected to that.

The pods are broad, ſhort, and ſmooth: the ſeeds are round, large, and not numerous.

It is a native of the Eaſt.

Burman calls it *Vicia multiflora ſiliqua breviore.*

GENUS VII.

BEAN.

FABA.

THE flower is papilionaceous, and regularly formed of four petals. The vexillum is large, oval, dented with a point at the top, and turned back at the ſides; and it has a long hollow bottom. The alæ are ſhorter than the vexillum; and are ſtrait, and a little heart-faſhioned. The carina is ſhorter than the alæ, and is flatted, and half round. The cup is compoſed of a ſingle tubular piece, divided into five irregular ſegments at the edge, the two upper ones ſhorter than the reſt, and convergent. The pod is very large, thick, and ſomewhat flatted: the ſeeds are few, large, and flatted alſo. The ſtalks are ſquare; and the leaves, though pinnated, have no tendrils.

Linnæus places this among the *diadelphia decandria*; the threads in the flower being ten, and formed into two aſſortments, nine in one, and the other ſingle.

This author takes away the name and generical diſtinction of this kind, and makes the bean to be a ſpecies of vetch.

We have obſerved already, that the form of the ſeed-veſſel and ſeeds is a ſufficient diſtinction for the bean from the vetch as a genus; and the ſhape of the ſtalk, and ſtructure of the leaves, confirms that diſtinction, and renders it perfectly obvious.

DIVISION I. BRITISH SPECIES.

1. The Horſe-Bean.

Faba vulgaris fructu minore.

The root is long, ſlender, and furniſhed with a great number of fibres.

The ſtalk is ſquare, upright, thick, hollow, not at all branched, and of a pale green.

The leaves are very large, and pinnated: each is compoſed of three or four pairs of pinnæ, with an odd one at the end.

In the pinnated leaves of all the preceding kinds, a tendril has the place of this ſingle or odd pinna, which is the proviſion of nature for holding them up by climbing, the plants themſelves being weak; but in the bean this aſſiſtance being not neceſſary, the leaves are completed without it.

The flowers riſe in the boſoms of the leaves, and are ſupported on ſhort footſtalks: they are white, with a large quantity of black, by way of variegation, and many black ſtreaks or lines: upon the whole, they are beautiful, and they have a very fragrant ſmell.

The pods are very large, and the ſeeds alſo large.

We find the *horſe-bean* very ſmall in places remote from all habitations, which ſeems to declare it a native of our country. But, in reſpect of plants whoſe utility has rendered them for ages the ſubjects of the gardener's and huſbandman's labours, it is hard to ſay with certainty, whether any plant of them we ſee with a wild aſpect have not ariſen from ſeeds caſually dropped. Thoſe who do not allow the bean to be a native wild plant with us, know not what other country to aſſign as its original place of growth; for in moſt others the caſe ſtands exactly as with us. Probably it is common to many places, Nature having made things, ſo uſeful in moſt inſtances, in a manner univerſal.

C. Bauhine calls it *Faba*, and *Faba minor, ſive Equina*. Others, *Faba minor, ſylveſtris*, and *communis*.

Authors

Authors deſcribe the *garden-bean* under the name of *Faba hortenſis*, as if a ſpecies diſtinct from this: and upon a like principle we ſee that *garden-bean* itſelf divided into innumerable other kinds. The truth is, all theſe are the offſpring of induſtry and good culture: the *garden-bean* is no more than the *horſe-bean*, improved from time to time by careful management; and all the others are again the ſame kind of variations from that.

In a treatiſe of gardening, it would be proper to enumerate and diſtinguiſh theſe ſeveral varieties: but the ſtudent in botany is to know there is but one ſpecies of *bean*. The plant is the ſame in ſtalk, leaf, flower, and fruit, the ſize and the degree of flatneſs only excepted; and its uſes and qualities are the ſame, whether it be taken from the field or the garden, or whether it flower in May or Auguſt.

The *bean*, like the pea, is a very wholeſome food; but it alſo ſerves the purpoſes of medicine.

The whole *bean*, ground to flour with its ſhell, and taken internally by way of medicine, is found to be an aſtringent of a uſeful kind. Diarrhæas of the worſt ſort, and even dyſenteries, have been cured by it. It is alſo good againſt the diabetes.

A pultice of *bean* flour externally is uſed in ſwellings; and the inſide of the freſh ſhells rubbed on warts will take them off. The ſame method of uſing them will alſo take ſpots off the face.

Many have written againſt *beans*, declaring them flatulent, difficult of digeſtion, and bad for the head: but nothing can be more idle than this learned preaching againſt a pulſe in common uſe as food for ourſelves and our cattle, and found upon repeated experience wholeſome to both.

Pythagoras is quoted with a moſt reverend ignorance by thoſe who write againſt the eating of them. He indeed directed his pupils to abſtain from *beans*; but this not becauſe they were bad for the head, as Solinus thinks; nor becauſe the ſouls of the dead paſſed into them, as Pliny dreamed. Plutarch might have ſet thoſe later commentators right, who have made ſo many wild conjectures about this ſhort precept, the meaning of which was, *Meddle not in party-matters*. The antients elected their officers by ballot, and beans were the balls.

It is ſuppoſed the bean of the antients was not the ſame with ours, and many gueſſes as wild and as unnatural have been made on that head as the former. The reaſon of the ſuppoſition is, that they always ſpeak of the dried *bean* as being round. The art of our gardeners has flatted out the *Windſor bean*: they lived before this improvement of the *bean* was introduced; and we ſee in the dry ſmall *beans* of the ſame kind, a ſhape which in general terms might not abſurdly or unnaturally be called round. The plant was beyond doubt the ſame.

GENUS VIII.

LIQUORICE.

GLYCYRRHIZA.

THE flower is papilionaceous, and compoſed of four petals. The vexillum is oblong, ſtrait, and ſmalleſt at the top. The alæ are oblong, and of a plain, ſimple ſtructure. The carina is ſharp, and is ſplit all the way up; and it is of the ſame ſize with the alæ. The cup is formed of a ſingle hollow piece, divided rudely into two lips at the edge: the upper lip is broke into three parts; of which the middle one is ſhorter and broader than the others, and is ſplit at the end: the lower lip is ſtrait, narrow, and of a ſimple ſtructure. The pod is oblong, compreſſed, and acute: the ſeeds are few, and of a kidney-like ſhape.

Linnæus places this among the *diadelphia decandria*; the threads in the flower being ten, and arranged in two parcels, nine in one, and a ſingle one in the other.

DIVISION I. BRITISH SPECIES.

Common Liquorice.

Glycyrrhiza vulgaris ſiliquis glabris.

The root is very long and creeping; of the thickneſs of a finger, and of a tender, juicy ſubſtance: it is of a duſky brown on the outſide, of a fine yellow within, and of a ſweet taſte.

The ſtalk is round, firm, upright, not much branched, and four feet high.

The leaves are long, large, and regularly pinnated: each is compoſed of eight or more pairs of pinnæ; and theſe are oblong, narrow, and pointed at the ends, and of a pale green: they reſemble the leaves of the aſh-tree, but are ſmaller.

The flowers grow on long and ſlender foot-ſtalks riſing from the boſoms of the leaves, ſeveral on each: they are ſmall and bluiſh.

The pods are oblong, ſlender, and of a pale green: the ſeeds are large and brown.

It is ſaid to have been found wild in the northern parts of the kingdom: but, like other plants frequently and commonly cultivated in our fields, it is not eaſy to ſay whether it be truly a native or not: probably enough it may be ſo; for it is evidently wild in other countries, in which the degrees of heat and cold are about equal to this.

It flowers in September; but with us it does not produce its flowers and fruit ſo freely as in ſome other places. Indeed Nature has made ſo good a proviſion for the multiplying this plant by root, that it no where ripens its ſeeds in ſuch abundance as thoſe that can only be propagated that way.

C. Bauhine

C. Bauhine calls it *Glycyrrhiza ſiliquoſa ſive Germanica.*

It was originally cultivated in Germany, and in a manner all Europe ſupplied thence with the root; afterwards it was raiſed in Spain, and now in England there is a great deal propagated; and it is ſo valuable a commodity, that the huſbandmen would find it extremely worth their while to introduce its culture in many other parts of the kingdom.

Liquorice is a celebrated medicine; and it deſerves all that has been written of it. We ſee it principally in three forms; the freſh root, the dried root, and what is called the juice. This laſt is a ſtrong decoction of the root boiled to a firm conſiſtence. The freſh root is in general the beſt for uſe.

It is excellent to take off the acrimony of the humours on many occaſions. In coughs it is a ſovereign remedy, approved by a long experience; and it promotes expectoration at the ſame time that it thickens the juices. It is alſo good in nephritic complaints from the ſame principle.

The antients looked on it as a remedy both againſt thirſt and hunger. It will take off the common ſenſations of both for a time; but it is an error to ſuppoſe it can ſupply the place of food and drink in their effects.

It was directed by the old phyſicains to be ſucked frequently by perſons in dropſies, to abate their thirſt, and prevent their drinking too often: and this is ſingular, that whereas the ſweet of ſugar, in whatever form, makes perſons thirſty afterward, the ſweet of *liquorice*, which is at leaſt equal to it, does not. This is particular; but experiment will at any time ſhew it to be perfectly true.

A kind of beer may be brewed with *liquorice* in the place of malt, and it will have a conſiderable ſtrength and an agreeable flavour.

DIVISION II. FOREIGN SPECIES.

Echinated Liquorice.

Glycyrrhiza ſiliquis conglobatis echinatis.

The root is long, and very thick, and does not ſpread in the manner of the other. The outer bark is of a deep brown colour, the inner ſubſtance is of a duſky yellow; and the taſte is ſweet, as in the *common liquorice*, but more mawkiſh and leſs agreeable: if the bark be chewed with it, there is alſo a conſiderable bitterneſs.

The ſtalk is round, firm, hairy, upright, and a yard high.

The leaves ſtand irregularly: they are numerous, and pinnated: each is compoſed of eight or ten pairs of pinnæ, which are narrow, oblong, of a duſky green, ſomewhat hairy, and pointed at the ends.

The flowers grow in round heads, ſupported on long, ſlender footſtalks riſing from the boſoms of the leaves: they are ſmall and blue: the whole tuft together is conſpicuous.

The ſeed-veſſels are ſhort and flatted, of a pale green, and hairy: they follow the flowers in the ſame cluſtered manner; and the whole bunch of them is of the bigneſs of a ſmall wall-nut.

The ſeeds are large, kidney-ſhaped, and brown.

It is a native of Tartary, and is common alſo to ſome other parts of Europe. It flowers in Auguſt.

C. Bauhine calls it *Glycyrrhiza capite echinato.* Our people call it the *Hedge-hog liquorice.*

Its virtues are the ſame with thoſe of the former; but it is leſs pleaſant, and they are inferior; wherefore there can never be any temptation to uſe it, while the right kind is ſo univerſal, cheap, and common.

GENUS IX.

WOOD-VETCH.

OROBUS.

THE flower is papilionaceous, and compoſed of four petals. The vexillum is heart-faſhioned, and at the top terminates in a half cylinder, which is longer than the cup at the bottom. The alæ are oblong, and riſe upwards, and converge together: they are nearly as long as the vexillum. The carina turns up, and is divided underneath: the edges are compreſſed together, and the belly is ſwelled. The cup is formed of a ſingle piece, and is tubular, and very ſlightly indented in five places at the edge. The pod is long, ſlender, and rounded, and it turns up at the top, where it is ſharp-pointed: the ſeeds are numerous and round. The leaves are pinnated; but they have no tendrils.

Linnæus places this among the *diadelphia decandria*; the threads being ten, nine in one body, and one ſingly.

DIVISION I. BRITISH SPECIES.

1. Common Wood-vetch.

Orobus vulgatior.

The root is long, thick, and ſpreading: it penetrates far into the ground, and remains many years: its ſubſtance is firm, and its taſte not unpleaſant.

The ſtalks are numerous, firm, and rigid: they do not ſupport themſelves upright, nor have tendrils; for which reaſon they trail upon the ground:

ground: they are a foot and half long, of a pale green, ſtriated, and hairy.

The leaves are pinnated in a very regular and beautiful manner: each is compoſed of eight or ten pair of ſmall pinnæ, which are oblong, and of a duſky green on the upper ſide, and of a paler green underneath.

The flowers ſtand in little cluſters ſix or eight together, and are of a plain rediſh colour on the outſide, and of a dead purple, ſtreaked with white, within.

The pods are broad, ſhort, and ſomewhat flatted: the ſeeds are alſo ſmall and flatted.

We have it in the north of England, and in ſome of the ſouthern provinces in woods, but not common.

Ray calls it *Orobus ſylveſtris noſtras*. The older writers have not mentioned it.

2. Heath Orobus.

Orobus ſylvaticus foliis oblongis glabris.

The root is large, tuberous, and of an irregular form: its taſte is ſweet, and in ſome degree reſembles that of liquorice.

The ſtalk is weak, angular, ſtriated, of a duſky green, and a foot high.

The leaves are placed irregularly on it, and are of a deep green colour: they are of the pinnated kind, the larger conſiſting of two pairs of pinnæ, without either a tendril or an odd leaf at the end, and the ſmaller only of one pair.

The flowers grow on long footſtalks at the tops of the ſtalks and branches two or three together, and they are of a pleaſing purple colour.

The pods are long and ſlender, and the ſeeds are roundiſh.

It is very common among buſhes on heaths and in woods, and it flowers in April and May.

Ray calls it *Orobus ſylvaticus foliis oblongis glabris*. Others, *Aſtragalus ſylvaticus*, *Aſtragaloides*, and *Lathyrus lignoſior*.

The roots ſliced and boiled are good againſt coughs; and in nephritic complaints: they on any occaſion are ſerviceable to obtund the acrimony of humors.

Broad leaved Orobus.

Orobus pinnis latis.

The root is long, thick, and divided into many parts.

The ſtalk is of a pale green, firm, and tolerably upright, and a foot and half high.

The leaves are very beautifully pinnated: they are long, large, and of a pale green: each is compoſed of two or three pairs of pinnæ, which are of an oval figure, but ſharp-pointed, and of a deep green.

The flowers grow in cluſters, eight or ten together, on long footſtalks riſing from the boſoms of the leaves: they are ſmall, and of a faint purple.

The pods are longiſh and ſlender, and the ſeeds are ſmall and round.

It is a native of Italy, and flowers in May and June.

Cluſius calls it *Orobus ſylvaticus venetus*; and others adopt the ſame name.

DIVISION II. FOREIGN SPECIES.

GENUS X.

GRASS-VETCH.

NISSOLIA.

THE flower is papilionaceous, and is compoſed of four petals. The vexillum is large, and the top and ſides turn back; the extremity alſo is a little nipped. The alæ are ſhort, blunt, and a little hooked. The carina is broad, and of a half-round figure, and is ſplit at the bottom. The pod is very long, and the ſeeds are numerous and round. The leaves are placed ſingly and alternately on the ſtalks; and are long and narrow, reſembling thoſe of graſs.

Linnæus places this among the *diadelphia decandria*; the flower having ten threads, nine connected in one body, and a ſingle one ſeparate. But this author does not allow the plant to be a diſtinct genus. He joins this, as the *clymenum*, *aphaca*, and others, all improperly with the *lathyrus*, making them ſpecies of that genus. The conformity of the flowers in all theſe plants is this author's reaſon; for his ſyſtem permits him to look no farther: but as the ſpecies are numerous, and generical diſtinctions therefore needful, where they can be ſupported, this ſimilarity of the flowers is the reaſon why the characters ſhould be more carefully ſought in other parts of the plant. The leaves afford theſe abundantly: and the genus of *lathyrus*, as he eſtabliſhes it, is thus with perfect reaſon, and by very obvious characters, divided into four; the proper *lathyrus* having a ſingle pair of pinnæ only, the *clymenum* two or more pairs, the *aphaca* ſingle leaves in pairs, and the *graſs-vetch* ſingle leaves placed alternately.

Theſe are diſtinctions as fixed and invariable as any the whole ſcience affords from the flowers of plants: they are uſeful in the higheſt degree, and they are obvious and familiar.

Of this ſingular genus there is but one known ſpecies, and that is a native of Britain.

The Graſs-Vetch.
Niſſolia.

The root is compoſed of numerous, thick, and tough fibres.

The ſtalk is of a pale green, ſlender, but tolerably erect, rarely much branched, and two feet high.

The leaves are placed irregularly on the ſtalks from the top to the bottom of the plant; and there generally riſes a young ſhoot of a branch in the boſom of every one of them: they are very long, narrow, and of a fine freſh green; ſo that they in all reſpects reſemble thoſe of graſs; and the plant is hardly diſtinguiſhed, except when in flower.

The flowers are placed on long, ſlender foot-ſtalks; and are of a bright red colour: they are ſmall, but very conſpicuous.

The pods are long and ſlender, and the ſeeds are numerous and round.

It is found by wood-ſides, and in hedges in many places. Authors have called it by a variety of names, but all of them liable to ſo many objections, that this new one *niſſolia* is very proper to be introduced in their place.

Some call it *Ervum ſylveſtre*; and others, *Catanance leguminoſa:* but *ervum* and *catanance* are names of different plants; ſo this breeds confuſion.

C. Bauhine calls it *Lathyrus ſylveſtris minor*; but the characters ſhew how improperly it is called by that name.

Its virtues are unknown.

GENUS XI.

KIDNEYVETCH.

ANTHYLLIS.

THE flower is compoſed of four petals, and is papilionaceous. The vexillum is oblong: it turns back at the ſides, and has a hollow bottom of the length of the cup. The alæ are of an oblong form, and are ſhorter than the vexillum. The carina reſembles the alæ in ſhape and ſize; but it is compreſſed. The cup is formed of one piece, and is of an oval figure, ſomewhat ſwoln and hairy: it is divided regularly into five ſegments at the edge, and it remains when the flower is fallen. The pod is very ſmall, and of a roundiſh figure; and it remains covered within the cup.

Linnæus places this among the *diadelphia decandria*; the flower having ten threads in two aſſortments, nine collected into a body, and one ſingle.

DIVISION I. BRITISH SPECIES.

1. Yellow Kidneyvetch.
Anthyllis pinnata flava.

The root is long, thick, and furniſhed with many fibres.

The firſt leaves are long, and pinnated in a very regular and perfect manner: each is compoſed of ſix or more pairs of pinnæ, which are oblong and narrow, and a much larger leaf of the ſame form at the end: the whole is hairy, and of a whitiſh green.

The ſtalk is round, thick, and a foot or more in height when it riſes up, but it more uſually ſpreads about the ground; and is of a yellowiſh colour.

The leaves on this are perfectly like thoſe from the root: they are placed irregularly, and are of the ſame pale colour.

The flowers ſtand in tufts at the tops of the ſtalks, and on long, ſlender pedicles riſing from the boſoms of the leaves: they are ſmall and yellow.

The pods are ſmall, and remain concealed in the cups.

We have it in dry paſtures not unfrequently. It flowers in July.

C. Bauhine calls it *Loto affinis vulneraria pratenſis*. Others, *Anthyllis leguminoſa*, and *Vulneraria ruſtica*.

It has the credit of being a famous wound-herb; but theſe are virtues leſs regarded now than heretofore.

2. Purple Kidneyvetch.
Anthyllis procumbens floribus rubris.

The root is long, thick, and furniſhed with numerous fibres.

The firſt leaves are regularly pinnated: each is compoſed of ſeveral pairs of ſmall pinnæ, with a larger odd leaf at the end.

The ſtalks are numerous, a foot long, and ſpread themſelves on the ground.

The leaves are placed irregularly on them, and are pinnated as thoſe from the root.

The flowers grow in large tufts at the tops of the ſtalks, and extremities of all the branches, and are of a bright red.

The ſeed-veſſels are very ſmall, and perfectly hid within the cup.

It is found in our weſtern counties, and flowers in Auguſt.

Ray calls it *Vulneraria ſupina flore coccineo*. The older authors were not acquainted with it.

DIVI-

DIVISION II. FOREIGN SPECIES.

Yellow Cretic Kidneyvetch.
Anthyllis Cretica flore flavo.

The root is long, ſlender, and divided into numerous parts.

The firſt leaves are oblong, and undivided: they are of an inverted oval figure, broad, and rounded at the end, and narrow at the baſe.

The ſtalks are numerous, weak, and branched: they are of a pale green, and a foot and half high.

The leaves ſtand in an irregular manner on the ſtalks, and are ſmall; about five grow together in an odd pinnated manner.

The flowers grow at the tops of the ſtalks and branches, and are ſmall and yellow; eight or ten of them ſtand together in a cluſter.

The ſeed-veſſels are ſmall, and they are contained in broad membraneous caſes. Theſe are formed of the cups of the flower, which ſwell into this ſhape and bigneſs after it is fallen.

The ſeeds are few and ſmall.

It is frequent in the Greek iſlands, and flowers in Auguſt.

Proſper Alpinus calls it *Trifolium falcatum:* a ſtrange name, but others have copied it.

GENUS XII.

HORSE-SHOE VETCH.

HIPPOCREPIS.

THE flower is compoſed of four petals, and is papilionaceous. The vexillum is heart-faſhioned, and has a very long bottom. The alæ are of an oval form, and are obtuſe; and the carina is flatted and hooked. The pod is crooked, long, flatted, and cut deeply in at ſmall diſtances all along the inner edge; ſo that it appears compoſed of a number of little points, faſtened by narrow ends to the edge of the back. The ſeeds are ſmall, oblong, and hooked; and one of them is lodged in every joint of the pod.

The ſingular form of the pod and ſeeds, which in ſome degree reſembles a horſe-ſhoe, has obtained it the Latin name *ferrum equinum*, as well as the Engliſh one *horſe-ſhoe vetch*; but it is better to uſe the more modern term *hippocrepis*, as it is a ſingle word; for generical names ſhould never conſiſt of more.

Linnæus places this among the *diadelphia decandria*; the threads being ten, and in two aſſortments, nine in one body, and another ſingle.

DIVISION I. BRITISH SPECIES.

Tufted Horſe-ſhoe Vetch.
Hippocrepis ſiliquis confertis.

The root is ſmall, and divided into ſeveral parts.

The firſt leaves are long, narrow, and pinnated: each is compoſed of ſix or more pairs of ſhort, oval pinnæ; and they are of a pale green: an odd leaf terminates each; and this is no larger than the others.

The ſtalks are numerous, ſlender, weak, branched, and eight or ten inches high.

The leaves on theſe are pinnated, and perfectly reſemble thoſe from the root.

The flowers are ſmall, and of a gold yellow: they grow in a kind of round cluſter at the top of the ſtalk, and on long pedicles riſing from the boſoms of the leaves; and they are of long continuance.

The pods are long, crooked, and indented: they hang from the footſtalk in the manner of a rude and ragged head of hair; whence ſome have named the plant.

It is found on high chalky grounds in many parts of the kingdom, and flowers in July.

C. Bauhine calls it *Ferrum equinum Germanicum ſiliquis in ſummitate.* Others, *Ferrum equinum comoſum.* Some, *Hedyſarum glycyrrhizatum.*

DIVISION II. FOREIGN SPECIES.

Single podded Horſe-ſhoe Vetch.
Hippocrepis ſiliquis ſingularibus.

The root is long, thick, and furniſhed with many fibres.

The firſt leaves are long, narrow, and pinnated: each conſiſts of four or five pairs of pinnæ, with an odd one at the end; and theſe are broad, ſhort, and heart-faſhioned, ſmalleſt at the baſe, broadeſt at the top, and indented at the end.

The ſtalks are numerous, weak, and low.

The leaves on theſe are pinnated in the ſame manner as thoſe from the root, and are of a pale green colour.

The flowers ſtand ſingly on ſlender footſtalks riſing from the boſoms of the leaves; and they are ſmall and yellow.

The pod is long, ſomewhat crooked, and deeply indented: the ſeeds are ſmall, and crooked, in the ſhape of an *horſe-ſhoe*.

It is frequent in Italy, and flowers in July.

C. Bauhine calls it *Ferrum equinum ſiliqua ſingulari.*

GENUS

GENUS XIII.

BIRDSFOOT.

ORNITHOPODIUM.

THE flower is compoſed of four petals, and is of the papilionaceous kind. The vexillum is ſmall, and cordated or heart-faſhioned at the top. The alæ are oval, and ſmaller than the vexillum. The carina is very ſmall and flatted. The cup is formed of a ſingle leaf, divided lightly into five ſegments at the edge, and it remains when the flower is fallen. The pod is long, ſlender, and jointed.

Linnæus places this among the *diadelphia decandria*; the threads in the flower being ten, in two aſſortments, nine joining together in a body, and the other ſingle.

Several flowers are in this genus placed on one receptacle; and the pods being numerous, and of this ſingular form, have ſome reſemblance to the foot of a ſmall bird; whence the name. Linnæus ſhortens it, and writes the word *ornithopus*.

DIVISION I. BRITISH SPECIES.

Common Birdsfoot.

Ornithopodium ſiliquis incurvis.

The root is long, ſlender, and furniſhed with numerous fibres, with little tubercles often hanging to them.

The firſt leaves are ſmall, oblong, narrow, and beautifully pinnated: they are of a pale greyiſh green, and ſpread themſelves in a regular manner upon the ground.

The ſtalks riſe among theſe; and are numerous, weak, and four or five inches high.

The leaves on them are numerous, and placed irregularly: they are pinnated in the ſame manner as thoſe from the root, each conſiſting of twelve or more pairs of very ſmall roundiſh pinnæ, with an odd one at the end.

The flowers are ſmall, and variegated with purple, white, and yellow: they ſtand in cluſters on little footſtalks, and have a pretty appearance.

The pods are long, ſlender, and jointed, a little crooked, and of a pale green: they very much reſemble in the cluſter the foot of a ſmall bird.

It is common in dry, hilly paſtures, and flowers in June. Hyde-park abounds with it.

C. Bauhine calls it *Ornithopodium minus*; and he deſcribes a variety of it ſomewhat larger, under the name of *Ornithopodium majus*. Moſt of the common writers are guilty of the ſame error: the plant is the ſame, only more or leſs nouriſhed.

DIVISION II. FOREIGN SPECIES.

Flat-podded Birdsfoot.

Ornithopodium ſiliquis compreſſis.

The root is long, ſlender, and furniſhed with a few fibres.

The firſt leaves are long, narrow, and very regularly pinnated: each is compoſed of ten or twelve pairs of ſmall pinnæ, which are of an oval form, ſharp-pointed, of a pale green colour, and a little hairy.

The ſtalks are numerous, weak, and low: they are divided into a few branches, and are of a pale green.

The leaves on theſe perfectly reſemble thoſe from the root, and are of the ſame pale green.

The flowers ſtand on long footſtalks one or two on each; and they are ſmall and yellow.

The pods are long, ſlender, and crooked; and they are of a duſky colour, and rough on the ſurface.

The ſeeds are ſmall and brown.

It is common in Italy, and flowers in Auguſt.

C. Bauhine calls it *Ornithopodio affinis hirſuta ſcorpioides*. Others, *Scorpioides leguminoſa*.

GENUS XIV.

PODDED MILKWORT.

GLAUX.

THE flower is compoſed of four petals, and is of the papilionaceous form. The vexillum is upright, nipped at the top, oblong, and turned back at the edges. The alæ are of an oblong form, and ſmaller than the vexillum. The carina is nipped at the end, and is of the ſame length with the alæ. The cup is formed of a ſingle piece, divided lightly into five ſegments, which are ſmalleſt on the lower ſide. The pod is ſhort, and heart-faſhioned.

Linnæus places this among the *diadelphia decandria*; the threads in the flower being ten, in two diviſions, nine in one, and a ſingle one in the other.

This author joins it to the *aſtragalus*, as of the ſame genus: but they differ obviouſly; the pods of the *aſtragalus* being oblong and obtuſe, and that of the *glaux* ſhort and pointed.

Small Fine Tare

Smooth podded fine Tare

Tufted Fine Tare

Great tufted fine Tare

Thick podded broad leav'd fine Tare

Horse Bean

Common Liquorice

Echinated Liquorice

Heath Orobus

Broad leav'd Orobus

Grass Vetch

Yellow Oxtree kidney Vetch

Yellow kidney Vetch

Single podded Hairy shoe Vetch

Tufted Hairy shoe Vetch

Common Birdsfoot

Flat podded Birdsfoot

Common Cocky Head

Triquetrous Vetch

DIVISION I. BRITISH SPECIES.

1. Liquorice Vetch.

Glaux procumbens ſiliquis majoribus.

The root is long, thick, and furniſhed with many fibres.

The ſtalks are numerous, and of a pale green: they ſpread themſelves in a circular manner, and do not riſe much above the ground.

The leaves are very large, pinnated, and of a pale green: each is compoſed of five or ſix pairs of larger oval pinnæ, with an odd one at the end; and they are ſharp pointed.

The flowers grow on footſtalks riſing in the boſoms of the leaves, and are of a pale yellow.

The ſeed veſſels are long, ſlender, and grow ſeveral in a cluſter: they are of a brown colour, and contain numerous ſeeds.

It is common in thickets at the foot of hills, nd flowers in Auguſt.

C. Bauhine calls it *Glycyrrhiza ſylveſtris floribus luteo palleſcentibus*. Others, *Glaux leguminoſa*, and *Aſtragalus luteus*.

2. Little Purple Glaux.

Glaux exigua incana purpurea.

The root is long, ſlender, and furniſhed with a few ſmall fibres.

The ſtalks are numerous, weak, and four inches long.

The leaves are placed irregularly on them, and are long and pinnated: each is compoſed of ſix or eight pairs of pinnæ; which are ſmall, ſhort, and hairy, and of a pale green colour; and there ſtands an odd one at the end.

The flowers are placed in cluſters on ſlender footſtalks; and they are of a bright purple.

The ſeed-veſſels are ſhort and ſwelled.

It is found in dry, hilly paſtures, and flowers in July.

Ray calls it *Glaux exigua purpurea montana noſtras*.

There is an opinion that theſe plants encreaſe milk in the breaſts of nurſes; but it is not ſupported on any good authority.

DIVISION II. FOREIGN SPECIES.

Spaniſh Milkwort.

Glaux capitulis imbricatis.

The root is long, ſlender, and furniſhed with a few fibres.

The firſt leaves are numerous, and beautifully pinnated: they are compoſed each of ten or twelve pairs of ſmall oval pinnæ, with an odd one at the end.

The ſtalks riſe among theſe; and are numerous, ſmall, and not much branched: they are ſix or eight inches in length, but uſually lie in part upon the ground.

The leaves on theſe are numerous, and placed irregularly: they are pinnated in the ſame manner as thoſe from the root, and are of a pale green.

The flowers are placed in thick, oval heads upon the ſtalks: they are ſmall and yellow.

The ſeed-veſſel is ſhort, and the ſeeds are ſmall.

It is frequent in Spain and Italy, and flowers in June.

C. Bauhine calls it *Ciceri ſylveſtri minori affinis*. Others, *Glaux Hiſpanica*, and *Glaux Dioſcoridis*.

GENUS XV.

COCKSHEAD.

ONOBRYCHIS.

THE flower is compoſed of four petals, and is of the papilionaceous kind. The vexillum is oblong, compreſſed, reflex, and dented at the end. The alæ are extremely ſhort, ſtrait, and narrow. The carina is ſhort, compreſſed, and ſplit along the bottom. The cup is formed of a ſingle leaf, divided into five pointed ſegments, and remains when the flower is fallen. The pod is ſhort, and conſiſts only of a ſingle cell.

Linnæus places this among the *diadelphia decandria*; the threads in the flower being ten, and formed into two aſſortments, nine in one body, and a ſingle one ſeparate from them.

He joins this with the *hedyſarum*, not allowing it to be a diſtinct genus. But the pods ſhew a manifeſt generical difference; thoſe of the *hedyſarum* being compoſed of ſeveral joints, and this of the *onobrychis* being ſingle.

DIVISION I. BRITISH SPECIES.

Common Cockſhead.

Onobrychis vulgaris.

The root is long: it penetrates very deep into the earth, and is furniſhed with numerous fibres.

The ſtalks are round, ſtriated, of a pale green, weak, and a foot and a half high.

The leaves are regularly pinnated: each is compoſed of ſix or eight pairs of pinnæ, with an odd one at the end; and theſe are oblong, narrow, ſharp-pointed, and of a freſh green.

The flowers ſtand in a kind of ſpikes, on long, ſlender footſtalks riſing from the boſoms of the leaves; and they are large and red.

The pods are ſhort and creſted; ſo that they reſemble in ſome degree a *cock's comb*; whence the plant has its name.

The ſeeds are large and brown.

It is found wild in dry, hilly paſtures, and flowers in Auguſt.

C. Bauhine calls it *Onobrychis foliis viciæ fructu echinato majori.*

It is ſown in fields for the food of cattle, in the manner of clover: and it anſwers the farmer's purpoſe much better. Nothing is a greater improvement in the modern huſbandry than the introducing of this plant. We received the ſeeds from France, where it has been long uſed; and now it is once upon a footing in our country, it will not loſe its place again. It is wonderful the uſe of it ſhould have been ſo long either unknown or neglected among us. It has been famous for the ſame purpoſe theſe two thouſand years: the Greeks cultivated it; and, from its cauſing plenty of milk in their cows, called it *polygalon.*

DIVISION II. FOREIGN SPECIES.

Prickly-headed Cockſcomb.

Onobrychis ſiliquis echinatis magnis.

The root is ſlender and white, long, and furniſhed with a few fibres.

The firſt leaves are pinnated in a regular manner: each conſiſts of eight or ten pairs of narrow, pointed pinnæ upon a middle rib: and there is an odd one at the end: their colour is a pale green.

The ſtalks are numerous, weak, and of a whitiſh colour: they often trail upon the ground, and ſeldom riſe to more than ten inches high.

The flowers ſtand at the tops in great cluſters, and are of a pale red.

The ſeed-veſſel is large and prickly, and contains a ſingle large kidney-ſhaped ſeed.

It is a native of the ſouth of France, and flowers in Auguſt. It is found near the ſea-coaſts.

C. Bauhine calls it *Onobrychis fructu echinato minor.*

SERIES II.

FOREIGN GENERA.

Thoſe of which there is no ſpecies naturally wild in this country.

GENUS I.

HATCHET VETCH.

HEDYSARUM.

THE flower is of the papilionaceous form. The vexillum is long and compreſſed, and it is nipped at the end. The alæ are long and ſtrait. The carina is ſtrait, compreſſed, and broadeſt in the outer part; and it is, as it were, cut off, and ſplit a part of its length. The cup is formed of a ſingle piece, and is divided into five ſegments: theſe are long, narrow, ſtrait, and ſharp-pointed; and they remain when the flower is fallen. The ſeed-veſſel is of an oblong form, and is compoſed of ſeveral joints, hung together in the manner of a chain.

Linnæus places this among the *diadelphia decandria*; the threads in the flower being divided into two aſſortments, nine in one, and a ſingle one for the other.

He joins this and the *onobrychis*, as we have obſerved, under one head: but the diſtinction is obvious and great; the ſeed-veſſel of the *onobrychis* being but a ſingle piece, and containing only a ſingle ſeed, and that of the *hedyſarum* being compoſed of many ſuch pieces linked together, and containing ſeveral ſeeds.

Where the diſtinctions are thus certain, it is very wrong to confound the genera, for the ſcience is rendered eaſy by the number of thoſe diſtinctions.

As we have no proper Engliſh name for this genus, the beſt method will be always to uſe the Latin one *hedyſarum*. We have added the common received Engliſh term; but, being compoſed of two words, it is wrong for a generical diſtinction.

French Honeyſuckle.

Hedyſarum ſiliquis articulatis rugoſis.

The root is long, thick, and furniſhed with numerous fibres.

The firſt leaves are large, long, and pinnated: they are compoſed each of five or ſix pairs of pinnæ; which are large, broad, and of a duſky green, and have an odd one of like figure at the end.

The ſtalks are numerous, upright, and of a pale green: they are not much branched, and are of a tough ſubſtance.

The leaves on theſe reſemble thoſe from the root; but they are of a pale and yellowiſh green.

The

The flowers ſtand in long, thick ſpikes at the tops of the ſtalks and branches; and are moderately large, and very beautiful; their colour is a bright red, and they have ſtreaks of a pale or fleſhy tinct. The whole is gloſſy, like poliſhed coral; and the mixture of colour bears ſome reſemblance to that of the juice and ſeeds of a freſh-opened ripe pomegranate.

It is a native of the warm parts of Europe, and flowers in June.

C. Bauhine calls it *Onobrychis ſemine clypeato aſpero major.* Others, *Hedyſarum clypeatum.* Our Engliſh name is very injudicious; but being that by which it is commonly known in gardens, we have preſerved it. It would be better to call it *The great ſcarlet hedyſarum.*

GENUS II.

LUPINE.

LUPINUS.

THE flower is papilionaceous. The vexillum is of a roundiſh, and ſomewhat heart-faſhioned ſtructure, and has the edges compreſſed and turned back. The alæ are of an oval ſhape, and nearly of the length of the vexillum; and they converge in the lower part. The carina is divided or ſplit at the bottom, and is of a hooked ſhape: it is undivided at the end, and is of the length of the alæ, but narrower. The cup is formed of a ſingle piece, and is divided only into two ſegments The pod is large, long, and ſomewhat flatted; and it contains ſeveral large roundiſh ſeeds. The leaves are formed like the fingers of a hand.

Common Lupine.

Lupinus vulgaris caulibus ramoſis.

The root is long, ſlender, white, and furniſhed with a few fibres.

The firſt leaves riſe in ſmall cluſters; and are of the fingered ſhape, each being compoſed of about ſeven parts regularly expanded: they are placed on long footſtalks, and are of a duſky green.

The ſtalk is round, upright, firm, hairy, of a whitiſh colour, and conſiderably branched: it is three feet high.

The leaves upon this reſemble thoſe from the root, but they are ſmaller: each is compoſed of about ſeven narrow parts; and the colour is a pale green.

The flowers are numerous and large: they ſtand ſeveral together on ſhort footſtalks riſing from the boſoms of the leaves. Their colour is naturally white; but the ſkill of our gardeners has variegated it in many ways. We ſee ſtriped flowers and double flowers in this ſpecies.

The ſeed-veſſels are long and large; and the ſeeds are broad, and ſomewhat flatted.

It is a native of Spain; whence it has been brought into our gardens, and has there furniſhed us with this number of beautiful varieties. It flowers in July.

C. Bauhine calls it *Lupinus ſativus flore albo.*

2. Blue Lupine.

Lupinus flore majore cæruleo.

The root is long, white, thick, and furniſhed with ſeveral conſiderable fibres.

The firſt leaves are numerous; and they are placed on long, ſlender footſtalks: they are compoſed each of five parts, ſpread in the manner of fingers; and theſe are oblong, narrow, wide aſunder, and of a pale green.

The ſtalk is upright, round, and of a pale green: it is not much branched, and is two feet and a half high.

The leaves on this reſemble thoſe from the root; but they are ſmaller, and of a paler green.

The flowers are placed on long footſtalks riſing from the boſoms of the leaves, and in a kind of ſpikes, ſix or more growing in a double ſeries on each footſtalk: they are large, and of a beautiful blue.

Naturally the colour is ſimple and unmixed, but art has rendered the flower double and ſtriped; and we frequently ſee it very beautiful in our gardens.

It is a native of the ſouth of France, where it flowers in their corn-fields in July and Auguſt.

C. Bauhine calls it *Lupinus ſylveſtris flore cæruleo.* Others, *Lupinus flore cæruleo majore.* Our people, the *Blue lupine.*

3. Small-flowered Blue Lupine.

Lupinus anguſtifolius flore minore cæruleo.

The root is compoſed of a long body, and innumerable fine fibres.

The ſtalk is ſlender, upright, of a pale green, and a yard high.

The leaves are placed on long footſtalks; and each is compoſed of five or ſix parts, which are ſlender, ſharp-pointed, and of a bluiſh green.

The flowers ſtand three or four together, in a kind of looſe ſpikes, on long footſtalks, riſing from the boſoms of the leaves; and they are ſmall, and of a deep blue, inclining to purple. This is their natural colour; but, like the others, they admit great variation from culture.

The pods are long and large.

It is a native of Italy, and flowers in July.

Ray calls it *Lupinus anguſtifolius cæruleus elatior.* Others, *Lupinus flore parvo cæruleo*, and *Lupinus procerior cæruleus.*

4. Yellow Lupine.

Lupinis flore luteo.

The root is compoſed of numerous ſpreading fibres.

The ſtalk is round, upright, of a browniſh colour, ſoft, hairy, and near a yard high.

The leaves are placed on long footſtalks; and each is compoſed of about nine parts, ſpread in the manner of fingers, and of a yellowiſh green.

The flowers are placed on long footſtalks in a kind

kind of ſpikes; and they are large and yellow, and of a very ſweet ſmell.

The ſeed-veſſels are large, and the ſeeds ſomewhat flat, and clouded or ſpotted with a variety of colours.

It is a native of Sicily, and is found moſt frequently near the ſea-coaſt. It flowers in Auguſt.

C. Bauhine calls it *Lupinus ſylveſtris flore luteo.* Others, *Lupinus flavus*, and *Lupinus luteus*; and we, the *Yellow lupine.*

5. The Giant Lupine.
Lupinus maximus hirſutus.

The root is long and thick, and it is furniſhed with innumerable fibres.

The firſt leaves are numerous, and very beautiful: they are placed on long footſtalks; and each is compoſed of ſeven or more parts: theſe are oblong, broad, of a beautiful bluiſh green, and hairy.

The ſtalk is round, thick, white, and a yard and a half high.

The leaves on this reſemble thoſe from the root, but they are ſmaller.

The flowers ſtand in ſpikes or cluſters on ſhort footſtalks; and are large, and of a beautiful ſky-blue.

This is their natural colour; but the induſtry of our gardeners has in this reſpect introduced ſo much variation, that the plant is ſcarce to be known for the ſame ſpecies, except for its great height and hairyneſs.

The ſeed-veſſels are very large, and the ſeeds are large and flatted.

It is a native of the Eaſt Indies, and flowers in Auguſt.

C. Bauhine calls it *Lupinus peregrinus major, ſive villoſus cæruleus major.* Its great height has got it with us the name of *Giant lupine.*

5. Perennial Lupine.
Lupinus cæruleus perennis.

The root is compoſed of numerous, ſlender, and long fibres, which run under the ſurface of the ground, and ſend up cluſters of leaves and ſtalks in different places. The colour of theſe fibres is rediſh; and they ſpread vaſtly, and remain many years.

The leaves are placed on long, ſlender, yellowiſh, hairy footſtalks: each is compoſed of ſeven or more parts, ſpread out like the rays of a ſtar; and theſe are ſhort, broad, rounded at the ends, and of a bluiſh green.

The ſtalk is round, of a pale green, weak, and about a foot and a half long: it does not often ſtand perfectly erect, but uſually leans or trails a little.

The leaves on this are placed upon long, ſlender footſtalks; and they reſemble thoſe from the root, but that they are compoſed of longer and narrower parts.

The flowers are ſmall and blue; the ſeed-veſſels are long, ſlender, and whitiſh; and the ſeeds are ſmall and flatted.

It is a native of North America, and flowers in Auguſt.

Moriſon calls it *Lupinus cæruleus minor perennis Virginianus repens.*

The *common white lupine* is cultivated in many parts of Europe, in the manner of our ſmall pulſes, for the food of cattle.

The freſh plant is cut up for this purpoſe about the time of its flowering.

The ripe ſeeds are in ſome places eaten at table; but they have a bitterneſs that is unpleaſing.

They are good againſt worms in children, and are for that purpoſe beſt given as a decoction, ſweetened with honey.

The young fruit entire, infuſed in water, promotes the menſes; and the flour of the ſeeds is uſed in cataplaſms, and other outward applications.

GENUS III.

KIDNEYBEAN.

PHASEOLUS.

THE flower is papilionaceous. The vexillum is obtuſe, and of a heart-like ſhape, and has the edges turned back. The alæ are oval, and have long, ſlender bottoms. The carina is narrow and twiſted. The cup is divided into two lips; the upper one of theſe is nicked at the tip, and the lower has three points. The ſeed-veſſel is long and ſlender; and the ſeeds are kidney ſhaped.

Linnæus places this among the *diadelphia decandria*; the threads in the flower being placed in two aſſortments, nine in one, and a ſingle one in the other; as in the preceding kind.

1. The common white Kidneybean.
Phaſeolus vulgaris.

The root is oblong, ſlender, and furniſhed with many fibres.

The ſtalk is round, of a duſky green, weak, jointed, and branched: it will trail upon the ground unleſs ſupported.

The leaves are large, and of a duſky green: three are placed on every footſtalk; and they are broad, and pointed at the ends.

The flowers ſtand ſeveral together, and are ſometimes white, ſometimes rediſh, and ſometimes purple. Theſe are accidental varieties, the ſpecies being in all the ſame.

The ſeed-veſſel is long and ſlender; and the ſeeds, when ripe, are kidney-ſhaped.

It is a native of the Eaſt Indies, and flowers in July.

C. Bauhine calls it *Smilax hortenſis, ſive phaſeolus major.* We call it the *Kidneybean, The white kidneybean*, and, fooliſhly enough, *The French bean.*

Its uſe is for the table; and, when young, and eaten moderately, it is very wholeſome. When too old, it is apt to cauſe flatulences.

At ſea they eat the dried ſeeds in the manner of peaſe; but this is a coarſe method, occaſioned by neceſſity. The young pod is the proper part.

2. Scarlet Kidneybean.

Phaſeolus flore coccineo major.

The root is long, ſlender, and hung with a great number of fibres.

The ſtalk is of a pale green, ſlender, and weak: when ſupported it will grow to ſix or eight feet in height; but otherwiſe it trails on the ground, and is ſhorter.

The leaves are placed on long footſtalks, and three ſtand on each: theſe are long, broad at the baſe, ſharp at the point, and of a fine green.

The flowers are large, and of a bright ſcarlet: they ſtand in a kind of ſpikes upon long footſtalks.

The ſeed-veſſel is large and oblong: the ſeeds are large and ſpotted.

It is a native of the Eaſt Indies, and flowers in July.

C. Bauhine calls it *Phaſeolus Indicus flore coccineo*; and others follow him.

GENUS IV.

BIRDS-PEA.

OCHRUS.

THE flower is papilionaceous. The vexillum is very broad, and nipp'd at the top. The alæ are roundiſh, and convergent. The carina is ſhort, flatted, and of the ſhape of a new moon. The cup is formed of a ſingle piece, divided into five ſegments. The ſeed-veſſel is long and large, and the ſeeds are round: they are fixed to the receptacle by a long rim. The leaves are ſingle, and have tendrils at the end.

Linnæus places this among the *diadelphia decandria*; the threads being ten, and diſpoſed as in the preceding genera.

This author does not allow the *ochrus* to be a diſtinct genus. He makes it a ſpecies of *pea*; but it is ſufficiently diſtinguiſhed by Nature. There is but one known ſpecies of this genus, and it has at all times been judiciouſly held diſtinct by authors.

The Birds-Pea.

Ochrus.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalks are numerous, weak, ſlender, and of a pale green: they lie upon the ground, if not ſupported: but, when there are buſhes near, they will run up to two feet and a half in height.

The leaves are of a very ſingular ſhape and ſtructure: their baſe is leafy, and runs down the ſtalk; from thence they run out broader to the extremity, where they divide into two parts, properly the leaves of the plant, and have tendrils. We call the leaves ſingle, in compliance with cuſtom; but the ſingle part is truly a kind of baſe all the way, on which grow theſe two ſeparate leaves.

The flowers ſtand ſingly on ſhort footſtalks in the boſoms of the leaves; and they are ſmall and white.

The ſeed-veſſel is long, and the ſeeds are round.

It is common wild in the corn-fields of Italy, and in the Greek iſlands. It flowers in Auguſt.

C. Bauhine calls it *Ochrus folio integro capreolos emittente.* Others ſimply *Ochrus*, and ſome *Ervilia.*

GENUS V.

LENTILL.

LENS.

THE flower is papilionaceous. The vexillum is large, broad, and obtuſe. The alæ are of the ſame form with the vexillum, and about half its bigneſs. The carina is very ſmall, and ſharp-pointed. The cup is divided into five narrow and longiſh parts. The ſeed-veſſel is ſhort, and the ſeeds are two in each pod, and they are round.

Linnæus places this among the *diadelphia decandria*, as the preceding: and he makes the *cicer* or *chich* a ſpecies of this genus; but they are ſufficiently diſtinct from the particular form of the *chich* ſeed, and always have been called by ſeparate names.

Common Lentill.

Lens vulgaris.

The root is ſmall, longiſh, and full of fibres.

The ſtalks are numerous and weak: they are of a pale green, and lie upon the ground in great part, unleſs they meet with buſhes or ſticks for ſupport.

The leaves are long, narrow, and beautifully pinnated: each is compoſed of ſeveral pairs of ſhort, oval pinnæ, with a tendril inſtead of an odd leaf at the end.

The flowers are ſmall, and of a faint purple: they grow on long, ſlender footſtalks, riſing from the boſoms of the leaves, two on each.

The ſeed-veſſel is ſhort and thick, and the ſeeds are roundiſh.

It is a wild plant in France among corn, and flowers in July.

C. Bauhine calls it *Lens vulgaris*, Others, *Lens major*, and *Lens minor*; for there is no difference between thoſe but from accident of culture.

Many things have been ſaid with little reaſon on the virtues of *lentils*: experience ſhews them falſe. We cultivate it for the food of cattle.

GENUS VI.

CHICH.

CICER.

THE flower is papilionaceous. The vexillum is large and roundiſh. The alæ are ſmall and obtuſe, and the carina is ſmall and ſharp-pointed. The cup is divided into five narrow ſegments. The ſeed-veſſel is ſhort and ſwelled; and the ſeeds are roundiſh, but cornered; ſo that they are ſuppoſed to repreſent the head of a ram.

Linnæus places this, as the preceding, among the *diadelphia decandria*, making it improperly a ſpecies of *lentill*.

Common Chich.

Cicer vulgare.

The root is long, ſlender, white, and furniſhed with numerous fibres.

The ſtalks are weak, ſlender, branched, and of a pale green.

The leaves are pinnated in a very regular and beautiful manner: each is compoſed of four or five pairs of pinnæ, with an odd one at the end; and theſe are ſhort, broad, and ſerrated at the edges.

The flowers ſtand ſingly on ſhort footſtalks riſing from the boſoms of the leaves; and they are ſmall, and of a whitiſh or purpliſh colour, varying in the degree as chance directs.

The ſeed-veſſel is ſhort and thick, and the ſeeds are two: theſe are large at one end, ſmall at the other, and cornered; ſo that they are ſuppoſed to reſemble a ram's head: but there muſt be ſome ſtrength of imagination to make out the likeneſs.

It is wild in the corn-fields of Spain, and flowers in Auguſt.

C. Bauhine calls it *Cicer ſativum*.

It is celebrated as a promoter of venery, but with no great reaſon. The ſeeds are of the pea kind in nature and qualities, and may be eaten in the ſame manner.

We raiſe the plant, among our other improvements of huſbandry, in fields for the food of cattle. It is an excellent herb for that purpoſe, and far from exhauſting the land, it mellows it, and prepares it for bearing larger crops of corn.

GENUS VII.

GOATS RUE.

GALEGA.

THE flower is papilionaceous. The vexillum is large and oval, and it is turned back at the top and at the edges. The alæ are oblong, and have a kind of appendage at the tips. The carina is ſtrait and compreſſed, and is oblong, and irregular in ſhape. The cup is ſhort, tubular, and divided into five ſegments at the edge. The ſeed-veſſel is long, ſlender, ſharp pointed, and knotted at the places where the ſeeds lie. The ſeeds are oblong, and kidney-ſhaped.

Linnæus places it among the *diadelphia decandria*; the threads being diſpoſed as in the preceding genera.

Common Goats Rue.

Galega vulgaris.

The root is long, ſlender, and furniſhed with numerous fibres.

The ſtalks are round, upright, branched, of a pale green colour, and a yard high.

The leaves are beautifully pinnated, and of a faint green: they are compoſed of five or more pairs of pinnæ, with an odd one at the end; and theſe are long, narrow, and ſharp-pointed.

The flowers grow in ſpikes upon long, ſlender footſtalks riſing from the boſoms of the leaves: they are ſmall, and of a pale blue, ſtreaked often with white.

The ſeed-veſſels are very long, ſlender, and green.

It is a native of Italy, and flowers in Auguſt.

C. Bauhine calls it *Galega vulgaris*; and others uſe the ſame name.

It was at one time in great eſteem as a cordial, alexipharmic, and ſudoriſic; but it never deſerved the praiſe beſtowed upon it, and is now with reaſon fallen into neglect. It is an ingredient in ſeveral of the old compoſitions of the ſhops.

GENUS

GENUS VIII.

BITTER VETCH.

ERVUM.

THE flower is papilionaceous. The vexillum is large, roundiſh, flat, and lightly turned back. The alæ are ſhort and obtuſe. The carina is very ſhort, and terminates in a point. The cup is divided at the edge into five narrow ſegments. The fruit is a long, rounded pod, diſtinguiſhed into a kind of joints by the ſwelling of the ſeeds.

Linnæus places this among the *diadelphia decandria*; the threads being diſpoſed as in all the preceding genera. This genus is generally called *orobus*; but that name being appropriated to another, it is beſt to uſe the other term *ervum*.

Narrow-leaved Bitter Vetch.

Ervum foliis anguſtis.

The root is compoſed of many ſlender fibres.

The ſtalks are numerous, weak, and trailing, unleſs ſupported.

The leaves are long and narrow: they are compoſed of numerous pairs of oblong and ſlender pinnæ, and are of a duſky green.

The flowers are large and white: they ſtand ſingly on long, ſlender footſtalks, riſing from the boſoms of the leaves.

The ſeed-veſſel is long, and appears jointed, ſwelling out at the places where the ſeeds lie.

It is a native of Italy, and the ſouth of France, and flowers in Auguſt.

C. Bauhine calls it *Orobus ſiliquis articulatis flore majore.* Others, *Orobus verus*, and *Orobus receptus herbariorum.*

It is a diſpute whether this be or be not the *orobus* of ſome of the antient writers; but it is of little conſequence, the virtues being too inconſiderable to warrant any great enquiry on that head.

2. Small-flowered Bitter Vetch.

Ervum floſculis minoribus.

The root divides into numerous fibres, and is whitiſh.

The ſtalks are ſlender, weak, hollow, of a pale green, and half a yard high.

The leaves are large, and of a beautiful green: they are compoſed each of ſix or more pairs of long and narrow pinnæ, with an odd one at the end.

The flowers are very ſmall and white: ſometimes lightly daſhed with purple.

They ſtand three or four together, on long, ſlender footſtalks.

The pods are ſlender, long, and very deeply divided or jointed by the ſwelling of the ſeeds. The ſeeds are ſmall and cornered.

It is a native of France, and flowers in Auguſt.

C. Bauhine calls it *Orobus ſemine obtuſo triangulo.* Others, *Cicer orobæum.*

GENUS IX.

SECURIDACA.

THE flower is papilionaceous. The vexillum is ſhort, of a heart-like ſhape, and turned back at the top and ſides. The alæ are oval, obtuſe, and convergent upwards. The carina is flatted, ſhort, and pointed. The cup is divided into two principal parts; the upper one is divided again into two, and the lower one into three ſegments. The ſeed-veſſel is very long, ſlender, and flatted, and the ſeeds are ſquare.

Linnæus places this among the *diadelphia decandria*; the threads in the flower being ten, and diſpoſed as in the preceding genera.

Great yellow Securidaca.

Securidaca major flore flavo.

The root is divided into many parts, and furniſhed with innumerable fibres.

The ſtalks are numerous, and of a pale green, tough, and branched; and, when properly ſupported, they will riſe to the height of four feet or more.

The leaves are large, and beautifully pinnated: each is compoſed of ſix or eight pairs of pinnæ, with an odd one at the end; and theſe are broad, ſhort, obtuſe, and of a bright green.

The flowers are large and yellow: they grow in tufts, four or more together upon the tops of ſlender footſtalks riſing from the boſoms of the leaves.

The ſeed-veſſels are long, ſlender, flatted, and ſomewhat hooked.

It is common in France and Italy among corn, and flowers in Auguſt.

C. Bauhine calls it *Securidaca lutea major.* Linnæus makes it a ſpecies of *coronilla.*

GENUS X.

CATERPILLARS.

SCORPIOIDES.

THE flower is papilionaceous. The vexillum is of a roundiſh form, turned back at the top, and nipped at the extremity. The alæ are of an oval form, and have a ſmall appendage. The carina is ot the form of a creſcent, and is ſplit on the lower part. The cup is flatted, formed of a ſingle piece, and lightly divided into five ſegments. The ſeed-veſſel is long, rough, and twiſted; and the ſeeds are roundiſh.

Linnæus places it among the *diadelphia decandria*; the threads of the flower being ten, and arranged in the ſame manner as in the preceding genera. He diſlikes the old name *ſcorpioides*, and calls it *ſcorpiurus*. Our people call it *caterpillars*, from the ſhape of the pods.

Long-leaved Caterpillars.

Scorpioides foliis longioribus indiviſis.

The root is long, ſlender, yellow, and furniſhed with numerous fibres.

The ſtalks are round, weak, of a pale green, and two feet in length, but not perfectly upright.

The leaves are oblong and undivided, obtuſe at the ends, and not ſo much as notched along the edges: they are of a bluiſh green.

The flowers are placed two together on the tops of very long and ſlender footſtalks riſing from the boſoms of the leaves: they are ſmall, but of a fine gold yellow.

The ſeed-veſſel is hairy, long, ſlender, and turned or twiſted round, and is brown: the ſeeds are ſmall, and alſo brown.

It is wild in Spain and Italy, and flowers in July.

C. Bauhine calls it *Scorpioides Beupleuri folio.* J. Bauhine, *Scorpioides ſiliqua campoide biſpida.* Our gardeners, *The caterpillar plant.*

Neither this, nor the generality of the former ſpecies, are diſtinguiſhed by any particular virtues. They are of the pulſe kind; and therefore their ſeeds would be eatable, if larger, and better flavoured. Their ſingularity gives them a place in gardens.

The END of the SEVENTEENTH CLASS.

THE

Prickly headed Cockscomb

French Honeysuckle

Common Lupine

Blue Lupine

Small Flowered blue Lupine

Yellow Lupine

The Giant Lupine

Perennial Lupine

Scarlet Kidney bean

Birds Pea

Common Scarlet

Common Chich

Common Goats Rue

Narrow leaved Bitter vetch

Small Flowered Bitter vetch

Great Yellow Everlasting Pea

Long leaved Caterpillars

THE

BRITISH HERBAL.

CLASS XVIII.

Plants whoſe flower is papilionaceous; whoſe ſeed-veſſel is a regular, but ſmall leguminous pod; and whoſe leaves are placed three on each footſtalk.

THE form and ſtructure of the flower is the ſame in this and in the preceding genus, and the diſpoſition of its threads the ſame.

For this reaſon Linnæus arranges theſe with the preceding genera under one and the ſame claſs, the *diadelphia decandria*; dividing them from the reſt only by the mark of a particular ſection. This was neceſſary according to his method, which does not admit any part of a plant but the flower and fruit into the conſideration of a claſſical diſtinction: but in nature the genera are perfectly ſeparated from all others, and kept united together by this ſingular character of the leaves growing three together. This is conſtant and certain: it does not in all the claſs admit a ſingle variation or exception; and it is therefore a proper mark for the diſtinction of a claſs; the ſmallneſs of the pod joining to eſtabliſh it.

In all the courſe of Nature, when carefully obſerved and truly followed, there are found marks of the connection, not only of the leſſer but greater diſtinctions: in this caſe the ſame method is obſerved in that reſpect as in others. The kidneybean is the genus uniting the leguminous and trifoliate plants, the leaves in all the ſpecies of that genus grow by threes; and the ſeed-veſſel is long, large, and of the proper leguminous kind.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are found naturally wild in this country.

GENUS I.

TREFOIL.

TRIFOLIUM.

THE flower is papillonaceous; the vexillum is turned backwards; the alæ are ſhort, and the carina is very ſhort, and ſomewhat broad. The cup is formed of a ſingle piece; and is ſmall, tubular, and divided lightly into five ſegments at the edge; and it remains with the fruit; as does alſo in many ſpecies the flower. The ſeed-veſſel is a ſhort pod, compoſed of a ſingle valve; and the ſeeds are roundiſh and few.

Linnæus places this among the *diadelphia decandria*, making it of the ſame claſs with the pulſe: and he comprehends under the name of this genus almoſt a whole claſs, deſtroying the received diſtinctions of melilot, hares-foot, *hop-trefoil*, and many other genera, and making all ſpecies of this one.

We have obſerved on preceding occaſions, that the placing too many ſpecies under one common term or generical name, is making the greateſt of all difficulties in the ſcience. This is no where ſo evident as in the preſent inſtance; the ſpecies of the *treſoil*, according to Linnæus, being too numerous for any rational method.

It is plain that author acted from neceſſity in this inſtance; his method allowing no generical diſtinctions to be formed upon any part beſide the flowers and fruit. But this is the great inconvenience of that method; and indeed it is ſo great, that, were there no other reaſon, it alone ought to prevail againſt the reception of his ſyſtem. He is obliged to acknowledge, that his generical character of the *treſoil* is imperfect: and he attempts to palliate the imperfection, by obſerving, that other authors have ſucceeded no better who have taken in the conſideration of the leaves: but there is more chance for a certain and diſtinct character, when theſe are taken to aſſiſt in the forming it, than when the flowers are conſidered alone. This is what we ſhall attempt in the diſtinctions of the ſucceeding genera.

DIVISION I. BRITISH SPECIES.

1. Common white Treſoil.

Triſolium pratenſe album.

The root is long, ſlender, and hung with many fibres.

The firſt leaves are ſupported on long, ſlender footſtalks, of a pale green: three leaves grow on each footſtalk; and they are of a deep green, broad, ſhort, and marked with a white ſpot uſually in form of a creſcent in the middle.

The ſtalks are numerous, ſhort, and procumbent: they divide into branches as they run upon the ground, and ſend out in an irregular manner a great many leaves of the ſame form and ſtructure with the firſt, and the ſtalks for the flowers among them: theſe are ſlender, like thoſe of the leaves, and of the ſame pale green.

The flowers are ſmall and white; and they ſtand a great many together, in a round, thick head.

The ſeed-veſſel is ſhort, and contains four ſmall ſeeds.

It is common in our meadows and paſtures, and flowers in June.

C. Bauhine calls it *Triſolium pratenſe album*; and moſt others uſe the ſame name.

It varies extremely in dry and barren ſoils. Some have from this accident made ſeveral imaginary ſpecies; and, on the other hand, others have ſuppoſed this itſelf not diſtinct from the *common red trefoil*, but only a variety. This is as great an error as the other. The colour of the flower is the leaſt diſtinction between them, as will be ſeen on comparing the deſcriptions together.

2. Long-flowered white Trefoil.

Triſolium album floſculis longioribus paucis.

The root is long, ſlender, and furniſhed with numerous fibres.

The firſt leaves are placed three together on ſlender footſtalks: they are ſhort, broad, and dented at the end, or regularly heart-faſhioned; and are of a pale green.

The ſtalks ſpread about the ground: they are numerous, weak, and of a whitiſh colour.

The leaves on theſe are like thoſe from the root: they are alſo of a pale green, and a little hairy.

The flowers are white: they grow at the extremities of the ſtalks, and on pedicles riſing from the boſoms of the leaves: they do not grow in round heads, but only two or three together.

The ſeed-veſſels are ſhort, and the ſeeds are few.

It is ſingular in this plant, that the ſeed-veſſels frequently hanging ſo as to touch the ground, take root: they are ſometimes drawn under the ſurface, or detained ſo cloſe to it, that duſt falls over them, and buries them. In this condition the ſeeds grow beſt of all, and ſpeedily furniſh abundance of new plants.

The natural ſize of the plant is not larger than the leaſt of the *hop-trefoils*, its branches three inches or more in length; but it will ſometimes grow much bigger.

It is common in dry paſtures, and flowers in June.

Ray calls it *Triſolium pumilum ſupinum floſculis longis albis.* Moriſon, *Triſolium album tricoccum ſubterraneum articulatum.* Others, *Triſolium folliculos ſub terra condens.*

3. Yellowiſh-flowered Trefoil.

Triſolium hirſutum majus flore albo-ſulphureo.

The root is compoſed of numerous ſlender fibres.

The firſt leaves are placed on long footſtalks, three on each; and they are oblong, narrow, of a duſky green, not at all ſerrated; but poined at the ends.

The ſtalks are numerous, ſlender, branched, of a yellowiſh green, and about a foot high.

The leaves on theſe are larger than thoſe from the root, otherwiſe like them; and generally they are bigger toward the top of the plant than on the lower parts of the ſtalks.

The flowers grow in a long and large cluſter, and they are of a very pale yellowiſh white.

The ſeed-veſſels are ſmall, and the ſeeds are minute and few.

We have it in dry paſtures not unfrequently. It flowers in June.

Ray calls it *Triſolium pratenſe hirſutum majus flore albo-ſulphureo, ſive ochro leuco.* The older writers were not acquainted with it.

4. Common red Trefoil.

Triſolium purpureum vulgare.

The root is compoſed of numerous fibres.

The firſt leaves are placed on ſlender footſtalks, three on each; and they are broad, ſhort, and of a deep green.

The ſtalks are numerous, and of a pale green: they are ſlender, branched, and eight or ten inches in length; but they uſually trail in part upon the ground.

The

The leaves on theſe are like thoſe from the root, but of a freſher green.

The flowers ſtand at the tops of the ſtalks, and branches in thick, longiſh heads; and they are of a bright red.

The ſeed-veſſel is ſhort, and the ſeeds are few and roundiſh.

It is common in our meadows and paſtures, and flowers in June.

C. Bauhine calls it *Trifolium pratenſe purpureum*; and moſt others follow him.

This ſpecies, when ſown in a favourable manner, yields what we call *clover*; the plant itſelf therefore is properly a wild clover. Mr. Ray diſtinguiſhes the clover of our cultivated land as a different ſpecies; but it is no other way different than as a plant improved by culture always is from the ſame in a wild ſtate.

5. Little heart-leaved red Trefoil.

Trifolium parvum foliis cordatis flore rubente.

The root is compoſed of a few ſlender fibres, joined to a ſmall oblong head.

The firſt leaves are few and ſmall: they ſtand on long footſtalks, three on each; and they are oblong, and heart-faſhioned: they are of a pale green, and lightly hairy.

The ſtalk is ſlender, upright, of a pale green, ſlightly hairy, and five or ſix inches high.

The leaves on this are ſmall; and they are placed on long, ſlender footſtalks, three on each: they perfectly reſemble thoſe from the root in ſhape and colour; and it is ſingular, that toward the top of the ſtalk they uſually grow in pairs.

The flowers are large, and of a pale red: they ſtand in oblong heads, upon weak footſtalks, uſually one head on each plant.

The ſeed-veſſels are ſmall, and the ſeeds are brown.

It is not uncommon in dry paſtures, and flowers in June.

Ray calls it *Trifolium pratenſe purpureum minus foliis cordatis.*

6. Long-leaved purple Trefoil.

Trifolium foliis longioribus floribus purpureis.

The root is compoſed of a few thick fibres.

The firſt leaves are ſupported on ſhort footſtalks: and they are oblong, broad, obtuſe, and of a deep green.

The ſtalks are round, weak, jointed, and a foot or more in height.

The leaves ſtand irregularly on theſe, and reſemble thoſe from the root, but that they are longer and narrower: three grow on each footſtalk; and they are alſo of a duſky green.

The flowers are of a deep purple: they are placed in ſhort, thick threads.

The ſeed-veſſels are ſhort, and the ſeeds are ſmall.

We have it not unfrequently on hilly paſtures. It flowers in June.

C. Bauhine calls it *Trifolium montanum purpureum majus.* J. Bauhine, *Trifolium majus ſecundum Cluſii.*

7. Smooth teaſel-headed Trefoil.

Trifolium ſtellatum glabrum.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalks are numerous, round, ſmall, and tolerably erect: they are not much branched, and they are eight inches high.

The leaves ſtand on ſhort, ſlender footſtalks, three on each; and they are oblong, narrow, ſharp-pointed, and of a duſky green.

The flowers ſtand at the tops of the ſtalks in oblong heads, reſembling in ſome degree thoſe of the common teaſel: they are ſmall and red, and they open more than thoſe of any of the other kinds at the end; whence the plant has obtained the name of *ſtarry trefoil.*

We have it in dry ſandy places, eſpecially near the ſea. It flowers in July.

Ray calls it *Trifolium ſtellatum glabrum.* Others, *Trifolium capitulis dipſaci*; a name much more expreſſive.

8. Soft-headed Trefoil.

Trifolium hirſutum capitulis mollioribus rubentibus.

The root is compoſed of a number of ſmall fibres, connected to a little head.

The firſt leaves are placed on long footſtalks, three on each; and they are broad, and heart-faſhioned; of a pale green, and a little hairy.

The ſtalks are numerous, weak, ſlender, and a foot high.

The leaves on the lower part of theſe reſemble thoſe from the root; but thoſe on the upper part are longer and narrower, and of a paler green.

The flowers are ſmall, and of a very pale red: they ſtand in longiſh tufts at the tops of the ſtalks and branches; and there generally are ſome leaves juſt under them.

The ſeed veſſels are ſmall, but the ſeeds are large.

It is found in dry, barren paſtures, and flowers in July.

Ray calls it *Trifolium parvum hirſutum floribus parvis dilute purpureis in glomerulis mollioribus & oblongis, ſemine magno.*

9. Round-knoted Trefoil.

Trifolium glomerulis ad caulium nodos rotundis.

The root is compoſed of numerous, long, and ſlender fibres, connected to a ſmall head.

The ſtalks are numerous, round, weak, jointed, and of a pale green: they are eight or ten inches in length, and they lie in great part upon the ground.

The leaves ſtand on ſlender footſtalks, three on each; and they are ſmall, broad, and dented at the edges; and are of a faint yellowiſh green.

The flowers ſtand in little ſoft heads at the inſertions of the leaves, and are of a very pale red. The heads have no footſtalks, but ſtand cloſe to the ſtalk.

The ſeed-veſſels are ſmall, and the ſeeds few and brown.

It is common in hilly paſtures, and flowers in June.

Ray calls it *Trifolium cum glomerulis ad caulium nodos rotundis.* Others, *Trifolium nodiflorum.*

10. Long-

10. Long-knotted Trefoil.

Trifolium glomerulis asperis oblongis.

The root is small and fibrous.

The stalks are weak, spreading, and of a pale green.

The leaves are placed at distances, three on a footstalk; and they are oblong, broad, and of a yellowish green.

The flowers are small and white: they are collected into large oblong heads, which stand in the bosoms of the leaves, and feel prickly; the segments of the cup being hard and pointed.

We have it in barren, dry pastures. It flowers in July.

Ray calls it *Trifolium flosculis albis in glomerulis oblongis asperis caulibus proxime adnatis.*

11. Strawberry-Trefoil.

Trifolium fragiferum.

The root is long and slender, and is hung with many fibres.

The first leaves are numerous: they are placed on slender footstalks, three on each; and they are short, broad, heart-fashioned, and of a pale bluish green.

The stalks rise among these, and are of a pale green, branched, irregularly upright, and of a firm substance: the leaves on them are numerous and small; they are of the same shape with those from the root, but of a pale colour.

The flowers are collected together in large, round heads, placed on long, slender, whitish footstalks. The flowers themselves are small, and of a very pale red; and they quickly fade. The cups are swoln; and they bend downwards, and terminate each in two points. These give the whole head a very singular appearance, altogether different from the other *trefoils*, and no unlike a strawberry.

It is common in pastures, and flowers in August.

C. Bauhine calls it *Trifolium fragiferum frisicum.* Others, *Trifolium fragiferum.*

12. Long-leaved Strawberry-Trefoil.

Trifolium fragiferum foliis longioribus.

The root is long, spreading, and furnished with numerous fibres.

The first leaves rise in a thick tuft: they are placed on long footstalks, three upon each; and they are small, oblong, and sharp-pointed; not heart-shaped, as in the other.

The stalks are pale, branched, trailing, and eight inches long.

The leaves on these are oblong, and somewhat broad, of a yellowish green, and sharp-pointed.

The flowers are small, and of a very faint red: the heads are placed on long, slender footstalks, and somewhat resemble strawberries.

We have it in damp places. It flowers in July.

Ray calls it *Trifolium fragiferum nostras purpureum folio oblongo.*

All these *trefoils* are of the same qualities. They are very wholesome food for cattle.

DIVISION II. FOREIGN SPECIES.

1. White mountain Trefoil.

Trifolium erectum album foliis longioribus.

The root is composed of numerous, thick, spreading fibres.

The first leaves are few, but large: they are placed by threes upon long footstalks; and are long, narrow, hairy, and of a bright green.

The stalk is weak, but tolerably upright, not much branched, and a foot and half high.

The leaves on this resemble those from the root: they are long, narrow, and of a pale green, and covered with silvery hairs.

The flowers stand in large oval heads at the tops of the stalks and branches; and they are small and white, with a faint tinge of yellow.

The seed-vessels are thick and short, and the seeds are small.

It is frequent in the German pastures, and flowers in August.

C. Bauhine calls it *Trifolium montanum album.*

2. Stinking, clammy Trefoil.

Trifolium bituminosum.

This is a robust and large plant.

The root is composed of many fibres.

The first leaves rise in a tuft, and are placed in threes upon slender yellowish footstalks: they are broad and short, and are of a pale green.

The stalk is upright, branched, and two feet high: it is blackish toward the bottom, and pale or greenish in the upper part.

The leaves on this are placed in threes; but they are longer and narrower than those from the root: they are of a bright green; and, when touched, they are found clammy; and they have a very strong and disagreeable smell.

The flowers stand in loose tufts at the tops of the stalks, and are of a beautiful violet colour.

The seed-vessels are short, and contain a few brown seeds.

It is frequent in the warmer parts of Europe, and flowers in August.

C. Bauhine calls it *Trifolium bitumen redolens.* Others, *Trifolium bituminosum.*

It is celebrated against venomous bites, and in malignant fevers.

An oil drawn from its seeds has been also in early times famous in paralytic complaints.

3. Long-spiked, purple Trefoil.

Trifolium purpureum spica longiore rubente.

The root is long, thick, and furnished with many fibres.

The leaves rise in a thick tuft, and are placed by threes upon short footstalks: they are long, narrow, and of a deep green, and very regularly notched at the edges.

The stalk is two feet high, firm, upright, branched, and of a pale green: the leaves on this are

Common White Trefoil

Long Headed White Trefoil

Yellowish Hoary Trefoil

Common Red Trefoil

Little hairy red Trefoil

Smooth Starry headed Trefoil

Strawberry Trefoil

White Mountain Trefoil

Stinking Clammy Trefoil

Soft headed Trefoil

Long Spiked purple Trefoil

Great Oval Headed purple Trefoil

Hairy Starry headed Trefoil

Burdock headed Trefoil

Bladder Trefoil

Pale long leaved Trefoil with Lychnis leaves

Great Conical purple Trefoil

Large Yellowish Hoary Trefoil

are numerous, and reſemble thoſe from the root: they are placed by threes upon ſlender, ſhort footſtalks; and to each of theſe there is a large membranaceous caſe or ſcabbard, which encloſes the ſtalk at their baſe, and runs on to a conſiderable length.

The flowers are of a beautiful purple: they are placed at the tops of the ſtalks and branches in ſpikes, two inches or more in length.

The ſeed-veſſels are ſhort, and the ſeeds are large and brown.

It is frequent in Italy and in the ſouth of France, and flowers in Auguſt.

C. Bauhine calls it *Trifolium purpureum ſpica longiſſima rubente.* Others, *Trifolium lagopoides majus.*

4. Great oval-headed purple Trefoil.

Trifolium capitulis ovatis foliis acuminatis.

The root is compoſed of a number of ſtraggling fibres, of a rediſh colour.

The ſtalks are numerous, tolerably upright, not very much branched, and a foot and half high.

The leaves are placed by threes on long and ſlender footſtalks: they are narrow, long, and of a firm ſubſtance, not at all dented at the edges, of a deep green, and ſharp-pointed.

The flowers are large and purple: they ſtand at the tops of the ſtalks in large oval heads.

The ſeed-veſſel is ſhort, and the ſeeds are few and brown.

It is found in the hilly paſtures of Germany, and flowers in Auguſt.

C. Bauhine calls it *Trifolium ſpica oblonga rubra.*

5. Hairy ſtarry-headed Trefoil.

Trifolium capitulis ſtellatis hirſutum.

The root is woody, long, brown, and ſpreading.

The firſt leaves are ſupported on long, ſlender footſtalks: they are ſhort, broad, and heart faſhioned, of a pale green, and hairy.

The ſtalks are numerous, weak, irregularly upright, and of a whitiſh colour.

The leaves on them are like thoſe from the root.

The flowers are collected together in round heads at the tops of the ſtalks; and are ſmall and purple, ſometimes white, and, as Caſpar Bauhine ſays, ſometimes lightly yellow; but this I have not ſeen.

The cups ſpread out at the points, and have a ſtarry appearance.

The ſeed-veſſels are ſmall, and the ſeeds brown.

It is frequent at the foot of Mount Veſuvius, and in other warm parts of Europe. It flowers in Auguſt.

C. Bauhine calls it *Trifolium ſtellatum*; a name others have given to our *teaſel*-headed kind.

6. Burdock-headed Trefoil.

Trifolium capitulis perſonatæ.

The root is ſmall and fibrous.

The firſt leaves are numerous, and they are ſupported on ſhort, rediſh footſtalks: they are broad, ſhort, and a little dented at the ends; and their colour is a faint green.

The ſtalks are numerous, weak, and not much branched: they are of a faint brown, and ſix or eight inches high.

The leaves on theſe perfectly reſemble thoſe from the root; but they have ſomewhat longer footſtalks.

The flowers ſtand at the tops of the ſtalks in large, round, and rough heads, very much reſembling ſmall burs: they are of a faint purple.

The ſeed-veſſels are ſlender, and the ſeeds few and ſmall.

C. Bauhine calls it *Trifolium globoſum repens.* J. Bauhine, *Trifolium glomerulis perſonatæ cherleri.*

It is found in the warmer parts of Europe, as in Italy, and in the ſouth of France; but not frequent.

7. Bladder-Trefoil.

Trifolium capitulis tumidis flore rubello.

This is a ſmall, but very pretty plant.

The root is long, ſlender, and furniſhed with numerous fibres.

The firſt leaves are few, and preſently fade: they are oblong, obtuſe, of a yellowiſh green, and placed by threes upon ſhort footſtalks.

The ſtalks are numerous; and they lie upon the ground, and are divided into many branches.

The leaves on theſe are ſmall, oblong, obtuſe, and of a bright green.

The flowers are of a very beautiful bright red: they grow in little, round heads, ſupported on ſlender footſtalks from the boſoms of the leaves.

When the flowers are fallen, the cups ſwell out into a kind of bladders; and the whole head ſomewhat reſembles that of our *ſtrawberry trefoil.*

It is common in Portugal, and flowers in July.

C. Bauhine calls it *Trifolium pratenſe folliculatum.* Others, *Trifolium Salamanticum.*

8. Pale, long-leaved Trefoil, with freſh-coloured flowers.

Trifolium foliis pallidioribus anguſtis floſculis carneis.

The root is ſlender, long, tough, and rediſh; and it has many fibres.

The firſt leaves are numerous, and of a pale greyiſh green: they are ſupported on ſhort footſtalks; and are oblong, and ſharp-pointed.

The ſtalk is round, upright, branched, and a foot high.

The leaves on it are long, narrow, and of a very pale green: they are ſharp-pointed, not at all dented at the edges, and have ſhort footſtalks; at the botom of which there is a membranaceous ſcabbard.

The flowers grow in large, round, and rough heads: they are ſmall when examined ſingly; and of a faint purple, a little deeper than what we call *fleſh-colour.*

It is frequent in the warmer parts of Spain, and flowers in Auguſt.

Moriſon calls it *Trifolium ſpicatum minus flore minore dilute rubente.*

9. Great flowered purple Trefoil.

Trifolium Alpinum flore magno rubente.

The root is thick, woody, brown, divided into many parts, and furniſhed with numerous fibres.

The firſt leaves are placed on long, ſlender, rediſh footſtalks; and they are very long, very narrow, and of a yellowiſh green: they are not at all ſerrated at the edges, but pointed at the ends.

The ſtalks are weak and ſmall: they are of a pale green, not at all branched, and about ſix inches high.

Toward the bottom they have a leaf or two; but the reſt is naked.

The flowers ſtand at the tops of the ſtalks in a very thick, ſhort head; and they are large and purple.

The ſeed-veſſel is ſhort, and the ſeeds are few and brown.

It is a native of the Alps, and flowers in July.

Moriſon calls it *Trifolium purpureum Alpinum*. Others, *Trifolium Alpinum*.

10. Large yellowiſh-flowered Trefoil.

Trifolium majus flore flaveſcente.

The root is long and white, divided into ſeveral parts, and furniſhed with numerous fibres.

The firſt leaves are ſupported on long, whitiſh footſtalks: they are broad, ſhort, of a freſh green; and on the under part each has a black ſpot.

The ſtalks are numerous, procumbent, and ſpreading: they are of a foot long, jointed, hollow, and of a pale colour.

The leaves on theſe reſemble thoſe from the root; but they are paler.

The flowers are large, and of a cream-colour; they ſtand in round looſe heads on the tops of the ſtalks.

The ſeed-veſſels are ſhort and thick, and the ſeeds are brown.

It is frequent in the ſouth of France, and flowers in Auguſt.

Moriſon calls it *Trifolium pratenſe caule fiſtuloſo foliis ſubtus maculatis flore ochro leuco.*

It agrees with the reſt in qualities, affording a good, wholeſome, and nouriſhing food to cattle.

GENUS II.

HARESFOOT.

LAGOPUS.

THE flowers are papilionaceous and ſmall. The vexillum is turned back. The alæ are ſhort, and the carina is very ſmall. The cup is as long as the flower, and is divided into five ſegments. The ſeed-veſſel is ſhort, and formed of a ſingle valve; and the ſeeds are few. The head into which the flowers are collected, is oval and hairy; the hairs growing from the cups: and the leaves ſtand three together.

Linnæus places this among the *diadelphia decandria*; the threads in the flower being ten, in two aſſortments. He confounds it with the *common trefoil*, and many other genera, under the common name *trifolium*. But this is erroneous; the hairyneſs of the heads is an obvious diſtinctive character of the genus; and the length of the cups, and their downy covering, which are both univerſal to all the kinds, are certain characteriſticks.

DIVISION I. BRITISH SPECIES.

1. Common Haresfoot.

Lagopus vulgaris.

The root is ſmall, oblong, and furniſhed with a few fibres.

The ſtalks are numerous, weak, branched, and not very upright: they are ten inches long, and of a pale rediſh colour.

The leaves ſtand at diſtances, three together, with ſcarce any footſtalks: they are ſmall, narrow, blunt at the ends, and whitiſh.

The flowers are very ſmall, and of a pale red: they ſtand in oval or oblong ſpikes or heads at the tops of the ſtalks, and the hairyneſs of their cups gives the whole a downy appearance, and whitiſh red colour.

The ſeed-veſſels are very ſmall, and the ſeeds are minute.

It is common in dry paſtures, and flowers in July.

C. Bauhine calls it *Trifolium arvenſe humile ſpicatum ſive lagopus*. Others, *Lagopus vulgaris*.

It is an aſtringent, and deſerves to be brought into uſe in medicine. The whole plant dried and powdered, and given half a dram for a doſe, is good againſt looſeneſſes with bloody ſtools. The decoction anſwers the ſame purpoſe.

2. Dwarf Sea Haresfoot.

Lagopus puſillus maritimus.

The root is long, ſlender, whitiſh, with a tinge of red, divided into ſeveral parts, and furniſhed with many fibres.

The ſtalks are numerous, and ſpread themſelves upon the ground: they are of a pale rediſh colour, very much branched, and three or four inches long.

The leaves are numerous: they grow in threes, without any footſtalks; and they are narrow, ſharp-pointed, of a pale green colour, and covered with a ſoft down.

The flowers grow in roundiſh heads of a very pale colour, white, with a tinge of purpliſh; and theſe ſtand in great number without footſtalks in the boſoms of the leaves.

The ſeed-veſſels are minute, and the ſeeds are brown.

It is not unfrequent on the coaſt of Suſſex, and flowers in Auguſt.

Lobel calls it *Lagopus perpuſillus ſupinus elegantiſſimus Anglicus*; and others take the ſame name from him.

DIVISION II. FOREIGN SPECIES.

1. Great Purple Haresfoot.
Lagopus purpureus maximus.

The root is long, thick, brown, and furniſhed with a few fibres.

The firſt leaves riſe on ſhort footſtalks; and are broad, ſhort, and of a pale green.

The ſtalks are a foot and half high, of a pale colour, irregularly diſpoſed, and branched.

The leaves on theſe are large: they are oblong, obtuſe, of a pale green, and ſoft to the touch.

The flowers are ſingly, ſmall, and of a faint whitiſh purple; but they are collected into long, thick, hairy ſpikes, two inches in length, and of a woolly aſpect.

The ſeed-veſſel is ſhort; and the ſeeds are large, and of a ſhining brown.

It is common in Italy, and flowers in June.

C. Bauhine calls it *Trifolium ſpica ſubrotunda rubra.* Others, *Lagopus maximus flore rubro.*

2. Scarlet Haresfoot.
Lagopus flore ruberrimo.

The root is long, brown, and furniſhed with a few fibres.

The ſtalks are numerous, ſlender, tolerably upright, and eight inches high: they are of a pale rediſh colour, and very little branched.

The leaves ſtand three together, without footſtalks, but with a kind of ſcabbard at the bottom: they are long, narrow, and of a duſky green.

The flowers grow at the tops of the branches in long and downy ſpikes, the hairs of which are much longer than in any other kind: they are ſmall, and of a pale red.

The ſeed-veſſels are ſhort; and the ſeeds are few, large, and brown.

It is a native of Spain, and flowers in July.

Ray calls it *Lagopus flore ruberrimo*; a name copied from Parkinſon, who firſt raiſed it in England.

GENUS III.

HOP TREFOIL.

TRIFOLIUM LUPULINUM.

THE flower is papilionaceous. The vexillum bends a little back, the alæ are ſhort, and the carina is very ſmall. The cup is little, hollow, and divided into five ſegments at the edge. The ſeed-veſſel is ſhort, and formed of a ſingle piece; and the ſeeds are roundiſh. The flowers grow together in little heads reſembling hops; and they fade ſoon, but remain with the cup to cover the ſeed-veſſel.

Linnæus places this among the *diadelphia decandria*, confounding it with the *haresfoot* and others, under the common name *trifolium*.

DIVISION I. BRITISH SPECIES.

1. Common Hop Trefoil.
Trifolium lupulinum vulgare.

The root is compoſed of ſmall fibres.

The ſtalks are numerous, ſlender, tolerably upright, of a pale yellowiſh green, and eight or ten inches high.

The leaves have ſhort footſtalks, and ſtand three on each: they are ſmall, obtuſe, of a yellowiſh green, and ſmooth.

The flowers are ſmall and yellow: they are placed together in little heads at the tops of the branches, reſembling ripe hops.

The ſeed-veſſel is ſhort, and the ſeeds are ſmall and brown.

It is common in our paſtures, and flowers in July.

C. Bauhine calls it *Trifolium pratenſe luteum capitulo lupuli vel agrarium.* Others, *Trifolium lupulinum vulgare*, and *Trifolium lupulinum majus.*

2. The leſſer Hop Trefoil.
Trifolium lupulinum minus.

The root is compoſed of ſmall fibres.

The ſtalks are numerous, weak, ſtraggling, branched, very irregular in their growth, and ten inches high: they are uſually naked toward the bottom; but the leaves ſtand frequent toward the top.

They have ſhort footſtalks, on which they ſtand in threes: they are ſmall, and heart-faſhioned, and of a faint green.

The flowers are ſmall and yellow: they grow together in little heads on ſmall footſtalks.

The ſeed-veſſel is ſhort, and the ſeeds are ſmall and brown.

It is common in our paſtures, and flowars in July.

Ray calls it *Trifolium lupulinum alterum minus.* J. Bauhine, *Trifolium luteum flore lupulino minus.*

3. The leaſt Hop Trefoil.
Trifolium lupulinum minimum.

The root is long, ſlender, divided into ſeveral parts, and furniſhed with numerous fibres.

The ſtalks are numerous, weak, branched, and about three inches in length; and they commonly lie upon the ground.

The leaves ſtand three together, with very ſhort footſtalks, and a kind of ſcabbard at the baſe: they are broad, ſhort, a little heart-faſhioned, and ſmooth.

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The flowers are ſmall and yellow; and they grow in little cluſters, rarely more than two or three together.

The ſeed-veſſels are very ſmall, and the ſeeds minute.

It is frequent in dry paſtures, and flowers in July.

Ray calls it *Trifolium lupulinum minimum*; a name uſed alſo by moſt others.

DIVISION II. FOREIGN SPECIES.

Hop Trefoil with ſerrated leaves.

Trifolium lupulinum foliis dentatis.

The root is long, ſlender, brown, and hung with many rediſh fibres.

The ſtalks are numerous, upright, of a pale green, a foot and half high, and not much branched.

The leaves ſtand at conſiderable diſtances by threes, and they have ſlender footſtalks: they are of an oval figure, ſharply ſerrated at the edges, and of a faint green.

The flowers are ſmall, and of a faint browniſh yellow: they ſtand together in oval heads, which are formed of brown cups.

The ſeed-veſſels are ſhort, and the ſeeds brown and large.

It is frequent in hilly places in the warmer parts of Europe.

C. Bauhine calls it *Trifolium montanum lupulinum.*

GENUS IV.

MELILOT.

MELILOTUS.

THE flower is papilionaceous, and ſmall. The vexillum is bent back, the alæ are ſhort, and the carina is ſmall. The ſeed-veſſel is a pod, formed of a ſingle piece, and is longer than the cup. The cup is hollowed at the baſe, and divided into five ſegments at the edge. The leaves ſtand three together, and the flowers are produced in looſe ſpikes.

Linnæus places this among the *diadelphia decandria*; the threads being ten, in two aſſortments. But he creates much confuſion, by joining it with the *lagopus*, and other three-leaved plants, under the common generical name of *trifolium*.

DIVISION I. BRITISH SPECIES.

1. Common Melilot.

Melilotus vulgaris.

The root is long, ſlender, rediſh, divided into ſeveral parts, and hung about with fibres.

The ſtalks are numerous, round, of a freſh green, upright, branched, and a yard high.

The leaves ſtand in threes, and have ſlender footſtalks: they are oblong, ſharp-pointed, and of a freſh and delicate green.

The flowers are ſmall, and of a gold yellow: they ſtand in looſe ſpikes of a conſiderable length at the tops of the ſtalks, and on pedicles riſing from the boſoms of the leaves.

The ſeed-veſſel is oblong, and the ſeeds are large and brown.

It is common in many parts of England in paſture-grounds, and under hedges; and ſometimes gets among the corn, unhappily for the farmer. It flowers in July.

C. Bauhine calls it *Melilotus officinarum Germaniæ.* Others, *Melilotus vulgaris.*

It is famous as a reſolvent and digeſtive, outwardly applied.

In pultices it will be of great uſe againſt hard ſwellings, ripening them, and at the ſame time taking off the pain.

The old authors have written much of it; and many years it was an ingredient in the plaiſter uſed for dreſſing bliſters. At preſent it is rejected from that compoſition; not for its want of efficacy, but to prevent miſchievous frauds; thoſe who made the plaiſter frequently putting in verdigreaſe, to give the colour which would not be obtained from the plant but with conſiderably more trouble.

2. Small Melilot.

Melilotus odoratus flore cæruleo.

The root is ſmall, and furniſhed with many fibres.

The ſtalks are numerous, erect, branched, and ten inches high.

The leaves ſtand in threes; and they are ſhort, broad, and of a pale green.

The flowers are ſmall and yellow: they ſtand in oblong heads at the tops of the ſtalks, and on pedicles riſing from the boſoms of the leaves.

The ſeed-veſſels are ſmall, and very numerous: they hang in a kind of looſe ſpike.

It is common in our paſtures, and flowers in Auguſt.

Tragus calls it *Melilotus minor.* Others improperly, *Trifolium lupulinum minus ſemine multo.*

DIVISION II. FOREIGN SPECIES.

1. Sweet Trefoil.

Melilotus odoratus flore cæruleo.

The root is long, ſlender, and furniſhed with a few fibres.

The ſtalk is round, upright, branched, and two feet high: it is of a pale green, and hollow.

The leaves ſtand on long footſtalks, three on each: they are oblong, moderately broad, of a beautiful green, and ſerrated at the edges.

The flowers ſtand in ſmall heads at the tops of the branches; and they are of a beautiful ſky-blue, and very ſweet.

The ſeed-veſſels are ſmall, and the ſeeds are few and brown.

It is common wild in Spain; and in other places is cultivated for the fragrance and laſting ſcent of the flowers.

C. Bauhine calls it *Lotus hortenſis odora.* Others, *Trifolium odoratum.*

2. Italian Melilot.

Melilotus folliculis majoribus.

The root is long, thick, rediſh, and furniſhed with numerous fibres.

The ſtalks are round, upright, firm, branched all the way up, and near a yard high.

The leaves have long, ſlender footſtalks, and ſtand three on each: they are ſhort, broad, and of a faint green toward the bottom; but longer, narrower, and of a more lively colour toward the top of the plant.

The flowers ſtand on the tops of the branches in long, looſe ſpikes; and they are ſmall and yellow.

The ſeed-veſſels are ſwoln, roundiſh, and rough: the ſeeds are few and large, and of a gloſſy brown.

It is frequent in the warmer parts of Italy, and flowers in June.

C. Bauhine calls it *Melilotus Italica ſolliculis rotundis.*

3. Sweet Melilot with hooked pods.

Melilotus odoratus ſiliquis falcatis.

The root is long, thick, rediſh, and divided into ſeveral parts.

The ſtalks are numerous, upright, branched, and four feet high: they are of a yellowiſh green, ſtriated, and hollow.

The leaves have long footſtalks, and they ſtand three on each: theſe are oblong, moderately broad, ſerrated, ſharp-poined, and of a rich and elegant green.

The flowers ſtand in looſe ſpikes at the tops of the ſtalks and branches, and are of a pale yellow.

The ſeed-veſſels are long, ſlender, and hooked upwards: the ſeeds are of a gloſſy brown.

It is common in the warmer parts of Europe, and the Eaſt. The flowers in the hotteſt countries have the moſt fragrant ſmell.

C. Bauhine calls it *Melilotus corniculis reflexis major.* Others, *Melilotus Syriaca*, and *Melilotus Syriaca odora.*

GENUS V.

FŒNUGREEK.

FŒNUM GRÆCUM.

THE flower is papilionaceous. The vexillum is turned back; the alæ are ſmall, and turned outwards; and the carina is very ſhort: The three upper petals ſeem to make a regular three-leaved flower, and this fourth is placed in the centre. The cup is ſhort, hollowed, and lightly divided into five ſegments. The ſeed-veſſel is oblong, and ſomewhat flatted: the ſeeds are numerous and roundiſh.

Linnæus places this among the *diadelphia decandria*; the threads in the flower being ten, in two aſſortments. He rejects the received name *Fœnum Græcum*, and calls the genus *Trigonella.* The antient name is but ill conſtructed; but as it is univerſally underſtood, and the plant has virtues worth regarding, which are ſpoken of by early authors under this old name, we have preſerved it.

DIVISION I. BRITISH SPECIES.

Small wild Fœnugreek.

Fœnum Græcum pumilum repens.

The root is long, thick, divided into ſeveral parts, and hung with numerous fibres.

The ſtalks are irregular and numerous: they are four or five inches long, and they ſpread upon the ground: they are of a pale colour, branched, and tough.

The leaves ſtand by threes on long, ſlender footſtalks, with a ſkin or membraneous ſheath at the bottom: they are ſmall, of an oval figure, of a dead green, and lightly ſerrated at the edges.

The flowers are large, and of a pale purple; they ſtand two or three together, upon ſlender footſtalks riſing from the boſoms of the leaves.

The ſeed-veſſels are thick and ſhort; and they are full of brown, large ſeeds.

It is common in barren grounds, and flowers in June.

Ray calls it *Fœnum Græcum humile repens ornithopodii ſiliquis brevibus erectis.*

DIVISION II. FOREIGN SPECIES.

Common Fœnugreek.

Fœnum Græcum vulgare.

The root is long, ſlender, and full of ſhort fibres.

The ſtalks are numerous, thick, very much branched, and of a pale green: they are a foot and a half long, but not regularly upright.

The leaves are placed in threes on long footſtalks: they are oblong, broad, and obtuſe at the ends; and they are of a duſky green on the upper ſide, and of a whitiſh colour underneath.

The flowers ſtand on ſhort footſtalks in the boſoms of the leaves: they are large and white, ſometimes tinged a little with a faint purple.

The ſeed-veſſel is long, and the ſeeds are yellow and large.

It is a native of the Eaſt, but is frequently ſown for uſe.

C. Bauhine calls it *Fœnum Græcum ſativum.* Others plainly *Fœnum Græcum.*

The ſeeds contain the virtue of the plant; and they are uſed externally with great ſucceſs: they are emollient and anodyne. They boil to a mucilage; which, whether uſed alone, or mixed in ointments or cataplaſms, is excellent againſt hard ſwellings, and againſt pain.

It is recommended by many in the ſciatica, applied outwardly, warm, and frequently repeated; and it is excellent againſt ſwellings in the breaſts. The ointment of marſhmallows owes a great deal of its emollient virtue to the ſeeds of the *fœnugreek.*

GENUS VI.

RESTHARROW.

ANONIS.

THE flower is papilionaceous. The vexillum is of a heart-like ſhape, and depreſſed at the ſides. The alæ are of an oval form; and they are not of more than half the length of the vexillum. The carina is ſharp-pointed, and it is ſomewhat longer than the alæ. The cup is divided into five parts, and is of the length of the flower. The ſeed-veſſel is ſhort, ſwelled, and hairy; and the ſeeds are kidney-ſhaped, and few.

Linnæus places this among the *diadelphia decandria*; the threads of the flower being ten, in two aſſortments. He places many of the trifoliate plants in one common genus; but this he ſeparates more juſtly.

DIVISION I. BRITISH SPECIES.

1. Common prickly Reſtharrow.

Anonis ſpinoſa vulgaris.

This is not a large, but it is a very tough, ſpreading plant.

The root is long, thick, and firm: it is ſo difficult to tear out of the ground, or to break, that it often ſtops the inſtruments of huſbandry; whence its Engliſh name.

The ſtalks are numerous, tough, firm, and covered with a rediſh bark: they are a foot and half long, they lie ſpread upon the ground, and they are full of very ſharp and ſtrong prickles.

The leaves are numerous, and of a bright green: they grow by threes without footſtalks; and they are oblong, narrow, ſharp pointed, and ſerrated at the edges.

The flowers ſtand on ſhort footſtalks riſing from the boſoms of the leaves; and they are of a bright purple.

The ſeed-veſſels are ſhort, and the ſeeds are numerous and brown.

It is common by way-ſides, and flowers in Auguſt.

C. Bauhine calls it *Anonis ſpinoſa flore purpureo.* Others, *Anonis vulgaris, ſive reſta bovis,* and *Reſta bovis purpurea.*

2. Purple Reſtharrow without thorns.

Anonis non ſpinoſa purpurea.

The root is long, and very tough, and is of a whitiſh colour.

The ſtalk is firm, hard, upright, and of a pale green.

The leaves ſtand irregularly on it; and are oblong, moderately broad, dented at the edges, and of a pale green, and a little hairy.

The flowers ſtand in the boſoms of the leaves on ſhort footſtalks; and are large, and of a beautiful red.

The ſeed-veſſel is ſhort, and the ſeeds are large and brown.

It is a native of tough ſoils, and common in moſt parts of England. It flowers in July.

C. Bauhine calls it *Anonis ſpinis carens purpurea.* Others, *Anonis non ſpinoſa flore purpureo.*

3. White Sea Anonis.

Anonis maritima pubeſcens.

The root is long, ſlender, white, and tough.

The ſtalks are numerous, branched, of a firm ſubſtance, and of a whitiſh colour.

The leaves are numerous and ſmall: they are oblong, broad, and covered with a white woolly matter.

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The flowers ſtand in the boſoms of the leaves; and are of a pale red, with ſome white.

The ſeed-veſſel is ſmall, and the ſeeds are minute.

It is common on our ſea-coaſts, and flowers in July.

Ray calls it *Anonis procumbens maritima noſtras foliis birſutis pubeſcentibus.* Others, *Anonis maritima.*

DIVISION II. FOREIGN SPECIES.

1. Yellow Reſtharrow without thorns.

Anonis flava non ſpinoſa.

The root is long, tough, and ſpreading.

The ſtalks are round, upright, very much branched, and a foot and half high.

The leaves ſtand on ſlender footſtalks, three on each; and they are long, narrow, of a pale green, and a little hairy, and dented at the ends.

The flowers ſtand on long footſtalks, and are large and yellow: they grow from the boſoms of the leaves.

The ſeed-veſſels are large, and the ſeeds numerous and brown.

It is a native of the Eaſt, and of the warmer parts of Europe. It flowers in July.

C. Bauhine calls it *Anonis viſcoſa ſpinis carens lutea major.* Others, *Anonis non ſpinoſa lutea.*

The whole plant is clammy to the touch, and has a very ſtrong ſmell. The flowers are ſometimes ſtriated.

2. Yellow Reſtharrow with drooping flowers.

Anonis lutea floribus pendulis.

The root is long, thick, and ſpreading.

The ſtalks are numerous, low, woody, very much branched, and covered with a rediſh bark.

The leaves are placed in threes on moderately long footſtalks; and they are ſhort, obtuſe, and hairy.

The flowers ſtand on ſlender, weak, and crooked or twiſted footſtalks, two on each: they are of a mixed brown and yellowiſh colour; and their cups are very hairy.

The ſeed-veſſels are long and large, and the ſeeds are kidney-like, and brown.

It is common in Italy, and flowers in Auguſt.

C. Bauhine calls it *Anonis viſcoſa minor flore pendulo.*

3. Red-flowered Reſtharrow with great pods.

Anonis purpurea ſiliquis majoribus.

The root is long, thick, and ſpreading.

The ſtalks are numerous, woody, upright, and two feet high: they are covered with a brown bark, and have no prickles.

The leaves ſtand by threes upon ſhort footſtalks, and are placed at conſiderable diſtances: they are oblong, broad, ſerrated, ſharp-pointed, and of a pale green.

The flowers are placed alſo on long footſtalks, two or three together; and they are ſmall and purple.

The ſeed veſſels are large, and the ſeeds alſo are large and brown.

It is a native of Spain, and flowers in July.

Moriſon calls it *Anonis purpurea præcox, ſive verna fruteſcens.* Many call it *Cicer ſylveſtre.*

All the ſpecies of *anonis* poſſeſs the ſame virtues; and though ſome of them have been particularly celebrated by foreign writers, there is none that has them in ſo high a degree as the common wild kind, here firſt deſcribed. It is a powerful diuretick, and a very effectual remedy in obſtructions of the viſcera.

The root has moſt virtue, and the cortical or outerpart of that more than the reſt. A decoction of this, with a little white wine, ſweetened to the palate, and drank in large quantities, is excellent againſt the gravel, and all nephritick complaints, ſoftening, and operating powerfully by urine.

The bark of the root, dried and powdered, is good in the jaundice and in dropſies; the doſe is half a dram twice a-day.

GENUS VII.

MEDICK.

MEDICA.

THE flower is papilionaceous. The vexillum is turned backwards: it is of an oval figure, undivided, and turned at the edges outwards. The alæ are oblong, and their ſides converge under the carina, to which part they are fixed by a ſmall appendage. The carina is oblong, ſplit, and turned back. The cup is formed of a ſingle piece; and is hollow, and divided into five equal ſegments at the edge. The ſeed-veſſel is long, flatted, and more or leſs crooked, twiſted, or wound round itſelf.

Linnæus places this among the *diadelphia decandria*; the filaments being ten, in two aſſortments. He alters the name, writing it *medicago.*

DIVISION I. BRITISH SPECIES.

1. Yellow Medick, with flat, wreathed pods.

Medica ſylveſtris flore flavo.

The root is long, thick, and ſpreading, and it remains many years.

The ſtalks are numerous, and of a tough, firm, and, as it were, woody ſubſtance: they are two feet in length, very much branched, and ſpread irregularly, in great part lying upon the ground.

The leaves ſtand on long footſtalks, three on each;

each; and they are oblong, narrow, of a yellowiſh green, and dented toward the ends.

The flowers ſtand in little cluſters at the tops of the ſtalks, and are of a bright yellow.

The ſeed-veſſels are flat, and a little turned about: the ſeeds are few, and angulated.

We have it in our hilly paſtures, but not common. It flowers in July.

C. Bauhine calls it *Trifolium luteum ſylveſtre lignea ſive fruteſcens.* Others, *Medica ſylveſtris.*

2. Common Heart-Trefoil.

Medica folio cordato maculato.

The root is long, ſlender, and furniſhed with numerous fibres.

The firſt leaves are placed on long, ſlender footſtalks, three on each; and they are of a heart-like ſhape, and each has a black ſpot in the middle.

The ſtalks are numerous, procumbent, and a foot long: they are ſlender, and of a pale green.

The leaves on theſe reſemble thoſe from the root: they are alſo ſpotted.

The flowers are ſmall and yellow.

The ſeed-veſſels are remarkable in their form and aſpect: they are rough, and twiſted in a ſingular manner. The ſeeds are large and few.

It is common in paſtures, and flowers in July.

C. Bauhine calls it *Trifolium folio cordato maculato.* Others, *Trifolium cordatum*, and ſome *Medica Arabica Camerarii.*

3. Little Hedgehog Trefoil.

Medica echinata minima.

The root is compoſed of numerous fibres.

The ſtalks are weak, ſlender, procumbent, and four or five inches long.

The leaves are few, and placed irregularly: they ſtand by threes on ſlender footſtalks; and are of an oval figure, but ſharp-pointed, and of a freſh green.

The flowers are ſmall and yellow: they ſtand in little cluſters at the tops of the ſtalks, and in the boſoms of the leaves.

The ſeed-veſſel is ſmall, but rough, and, as it were, prickly; whence the plant has obtained its common Engliſh name.

The ſeeds are angulated, and brown.

We have it in barren, hilly paſtures. It flowers in June.

C. Bauhine calls it *Trifolium arvenſe fructu minore.* Others, *Medica echinata minima*, and *Medica ſpinoſa.*

4. Prickly-edged Medick.

Medica fructu ad margines ſpinoſo.

The root is long, ſlender, and furniſhed with a few fibres.

The firſt leaves are placed on long footſtalks, three on each; and they are broad, ſhort, obtuſe, ſomewhat heart-faſhioned, but with a ſlight dent, and of a fine lively green.

The ſtalks are numerous, ſlender, and ten inches high.

The leaves ſtand at diſtances, and are like thoſe from the root.

The flowers are ſmall and yellow: they ſtand on ſlender footſtalks riſing from the boſoms of the leaves.

The ſeed-veſſel is twiſted round, and has an edge of ſtiff briſtles.

We have it in the ſouthern counties very frequent on ſandy ground, and in ſome other places. It flowers in July.

Ray calls it *Trifolium cochleatum modiolis ſpinoſis.* The old writers knew it not.

5. Black-fruited Medick.

Medica polycarpos fructu compreſſo nigricante.

The root is ſlender, oblong, white, and has a few fibres.

The firſt leaves are placed by threes on ſlender footſtalks; and they are ſmall and obtuſe.

The ſtalks are ſlender, not much branched, of a faint green, and eight inches high.

The leaves on theſe reſemble thoſe from the root, but are ſmaller.

The flowers are ſmall and yellow: they ſtand in great numbers on ſlender footſtalks riſing from the boſoms of the leaves.

The ſeed-veſſels are compreſſed, and blackiſh.

We have it in dry paſtures, but not common. It flowers in June.

Ray calls it *Medica polycarpos fructu minore compreſſo ſcabro.*

6. Prickly Sea-Medick.

Medica maritima ſpinoſa.

The root is ſmall and oblong.

The ſtalks are numerous, weak, procumbent, and eight or ten inches high.

The leaves are placed by threes on ſhort footſtalks; and they are ſhort, broad, obtuſe, and of a bright green.

The flowers are ſmall and yellow.

The fruit is twiſted and prickly.

The ſtalks of the plant are uſually purple toward the root; and the tops of the ſhoots are hairy.

It is found about our ſea-coaſts, and flowers in July.

Ray calls it *Medica marina ſupina noſtras foliis viridibus ad ſummos ramulos villoſis.*

DIVISION II. FOREIGN SPECIES.

1. Lucorne.

Medica ſativa flore purpureo.

The root is very long, and lives many years.

The ſtalks are numerous, firm, upright, much branched, and two feet or more in height: they are ſmooth, and of a pale green.

The leaves are placed very thick; and they are diſpoſed, as in the others, three on a ſtalk: they are oblong, ſharp-pointed, and ſlightly ſerrated: their colour is a freſh green.

The flowers are ſmall, and of a beautiful violet-colour: they are placed half a dozen together at the tops of the ſtalks, and on ſlender



Common Hare's foot



Dwarf Sea Hare's foot



Great Purple Hare's foot



Scarlet Hare's foot



Common Hop Trefoil



The lesser Hop Trefoil



The least Hop Trefoil



Hop Trefoil with Serrated Leaves



Common Melilot



Sweet Trefoil



Italian Melilot

Sweet Melilot with hooked Pods



Small Wild Fenugreek



Common Fenugreek

Common prickly Restharrow

Yellow Restharrow without Thorns

Yellow Restharrow with drooping flowers

Red flowered Restharrow with great Pods

der pedicles riſing from the boſoms of the leaves.

The ſeed-veſſels are ſmall and twiſted.

It is a native of the warmer parts of Europe, and flowers in May.

All authors call it *Medica ſativa*, and *Fœnum Burgundicum*.

The name *lacerne*, now applied to this plant, was at one time given by the French to the cockſ-head, and its former name ſaintfoin was given to this. There is no ſaying which is right, for both are arbitrary; and it is not eaſy to diſcover which was the original application.

The antients were very fond of this plant as fodder for their cattle. We read with aſtoniſhment the pains they beſtowed upon its culture. From the antient the knowledge travelled to the modern Italy, and thence to France and Flanders: of very late years we have got into the uſe of it in England; and it is one of the greateſt of the modern improvements in huſbandry.

It is a rich and excellent food for all kinds of cattle.

The *common wild medicas* poſſeſs in general the ſame qualities, but in an inferior degree. They enrich paſtures wherein they grow; and a good uſe might be made of them, by ſcattering the ſeeds among the graſs in grounds not very fertile.

2. Snail-Trefoil.

Medica fructu cochleato lævi.

The root is long, ſlender, and furniſhed with numerous fibres.

The firſt leaves are placed on ſmall footſtalks, and grow, as in the others, three on each: they are oblong, moderately broad, ſharp-pointed, ſerrated at the edges, and of a lively green.

The ſtalks are numerous, ſlender, branched, a foot or more in length, but not very upright.

The flowers ſtand on ſlender footſtalks riſing from the boſoms of the leaves, and they are yellow.

The ſeed-veſſel is very large, ſmooth, of a pale green, and twiſted in the manner of a ſnail.

The ſeeds are few and large.

It is a native of Italy. We ſow it in gardens for the ſingularity of the fruit.

C. Bauhine calls it *Trifolium cochleatum fructu rotundiore.*

3. Caterpillar-Trefoil.

Medica fructu convoluto aſpero.

The root is long, ſlender, and hung with many fibres.

The ſtalks are numerous, weak, ſlender, branched, and a foot or more in length.

The leaves ſtand thick upon them, three at each joint, on a long, ſlender footſtalk: they are ſhort, broad, obtuſe, and of a ſomewhat oval form, but inverted, or with the ſmaller part below.

The flowers are little and yellow.

The ſeed-veſſels are large, twirled about, and rough; ſo that they have the appearance of a green, hairy caterpillar rolled up.

It is a native of the Eaſt, and of the warmer parts of Europe. We keep it in gardens.

C. Bauhine calls it *Trifolium fructu compreſſo ſpinis horrido.*

From this and the former ſpecies the induſtry of our gardeners has raiſed a vaſt many varieties, which have been deſcribed by many as diſtinct ſpecies. This is the common error: but Linnæus is in the extreme on the other ſide. He rightly retrenches many; but he makes both theſe and the common wild kind the ſame ſpecies. This is plainly an error; becauſe the form of the leaves, as well as the fruit, differ.

4. Moon-Trefoil.

Medica ſiliquis lunatis.

The root is long and ſlender, and has very few fibres.

The ſtalks are numerous, weak, and of a pale green: they are a foot high, and branched.

The leaves have long, ſlender pedicles; three ſtand on each: they are oblong, broad, dented, and of a fine green.

The flowers are ſmall and yellow: they ſtand on ſhort, ſmall footſtalks in the boſoms of the leaves.

The ſeed-veſſel is broad, flat, and notched at the edges: it is turned round; ſo that it repreſents a new moon. The ſeeds are few and brown.

It is found about the edges of vineyards in Italy.

C. Bauhine calls it *Trifolium ſiliqua foliata.* Others, *Trifolium lunatum.*

5. Srubby Moon-Trefoil.

Medica ſiliquis lunatis fruteſcens.

The root is woody, long, divided, and ſpreading.

The ſtem alſo is woody, tough, and very much branched: the trunk is covered with a grey bark, but the twigs are green or greyiſh.

The leaves ſtand on long footſtalks, three upon each: they are oblong, obtuſe, and largeſt at the ends; and are of a greyiſh green.

The flowers grow three together uſually on ſlender footſtalks, and they are ſmall and yellow.

The ſeed-veſſel is flat, and turned round in form of a creſcent; but it is ſmooth on the edge, not nicked as the preceding.

The ſeeds are large, angulated, and brown.

It is a native of the Eaſt, and flowers in Auguſt.

Authors have miſtaken its proper genus: they have in general ranged it among the *cytiſi.*

C. Bauhine calls it *Cytiſus incanus ſiliquis foliatis.* Lobel, *Cytiſus maranta*; a name copied by moſt others.

GENUS IX.

BIRDSFOOT TREFOIL.

LOTUS.

THE flower is papilionaceous. The vexillum is roundiſh, and bends downward; and it has a long, hollow bottom. The alæ are ſhort, broad, obtuſe, and converge upwards. The carina is rounded below, cloſed above, ſhort, ſharp-pointed, and turned upwards. The cup is formed of a ſingle piece: it is hollow, and is divided into five regular ſegments. The ſeed-veſſel is long and ſlender, and the ſeeds are numerous and roundiſh. The leaves ſtand three on each footſtalk, as in the preceding genera; but there are alſo two ſmall ones on the ſtalk, at the inſertion of the footſtalk of the others.

Linnæus places this among the *diadelphia decandria*; the threads of the flower being ten, in two aſſortments.

DIVISION I. BRITISH SPECIES.

1. Common Birdsfoot Trefoil.

Lotus corniculata glabra minor.

The root is long, and furniſhed with many fibres.

The ſtalks are numerous, ſlender, firm, and branched: they are uſually of a rediſh colour, and are ten inches high.

The leaves are of a fine ſtrong green: three ſtand on a long footſtalk, and two at its baſe: they are oblong, and ſharp-pointed.

The flowers ſtand in cluſters at the tops of ſlender footſtalks, riſing from the boſoms of the leaves; and they are ſmall and yellow.

The pods are ſtrait, ſlender, and long.

It is common in our paſtures, and flowers in Auguſt.

C. Bauhine calls it *Lotus pentaphylla minor glabra.*

2. Narrow-leaved Birdsfoot Trefoil.

Lotus corniculata anguſtifolia glabra.

The root is long and ſlender.

The ſtalks are numerous, and very much branched: they are firm, upright, and ſix inches high.

The leaves ſtand three on a footſtalk, and two at the baſe of it: they are narrow, of a freſh green, and ſharp-pointed.

The flowers are ſmall and yellow: they ſtand, as in the other, on long footſtalks, ſix or eight together.

The ſeed-veſſels are long, ſlender, and brown.

The plant diſtinguiſhes itſelf at firſt ſight from the common kind by its upright, buſhy aſpect.

We have it in corn-fields, where the ſoil is clayiſh. It flowers in Auguſt.

Ray calls it *Lotus pentaphyllos minor anguſtioribus foliis fruticoſior.*

3. Great Birdsfoot Trefoil.

Lotus corniculata hirſuta major.

The root is compoſed of numerous, ſlender fibres.

The ſtalks are weak, of a pale colour, a little hairy, not much branched, and a foot or more in height.

The leaves are numerous and large: three ſtand on each footſtalk, and two at its baſe: they are oblong, broad, of a pale green, and lightly hairy.

The flowers are large and yellow, with a tinge of orange-colour: they ſtand in little tufts at the tops of the pedicles, which riſe from the boſom of the leaves.

The ſeed-veſſel is long, ſlender, and brown.

It is frequent in damp places, and flowers in Auguſt.

C. Bauhine calls it *Lotus pentaphyllos flore majore luteo ſplendente.* Others, *Lotus corniculata hirſuta major.*

The leaves of this plant are ſometimes very little hairy, and of a brighter green. In this ſtate it is deſcribed in Dillenius's edition of the Synopſis as a new ſpecies; but it is a variety owing only to its growing on a drier ſoil.

4. Dwarf Birdsfoot Trefoil.

Lotus corniculata minima foliis ſubtus hirſutis.

The root is compoſed of a few ſlender threads.

The ſtalks are numerous, weak, and procumbent: they are of a rediſh colour, and three or four inches long.

The leaves ſtand three on a footſtalk, and two at its baſe: they are ſhort, roundiſh, but terminated by a point; and of a blackiſh green above, and white and hairy underneath.

The flowers are ſmall and yellow: the pods are very ſlender and brown.

We have it in dry, hilly paſtures, eſpecially where the ſoil is chalky. It flowers in July.

Ray calls it *Lotus corniculata minor foliis ſubtus incanis.*

DIVISION II. FOREIGN SPECIES.

1. Square podded Lotus.

Lotus ſiliqua quadrata flore rubro.

The root is long, and furniſhed with many fibres.

The ſtalks are numerous and weak: they ſpread every way upon the ground; and are branched, and of a pale green, a little hairy, and a foot and half long.

The flowers are placed at diſtances: three grow upon

upon a ſhort footſtalk, and two at its baſe: they are of a duſky green colour, and ſoft to the touch.

The flowers ſtand on pedicles riſing from the boſoms of the leaves, two uſually on each; and they are large and beautiful: their colour is crimſon, and they have a look of velvet.

The pods are ſhort and thick, and have four membranous edges, which give them a ſquare aſpect.

The ſeeds are large and yellowiſh.

It is a native of Spain, but is in ſome parts of England cultivated in gardens for the ſake of the ſeeds, which are pleaſant and wholeſome. Many eat them in the manner of peaſe.

C. Bauhine calls it *Lotus ruber ſiliqua anguloſa.* Our people, *Crimſon-pea*, or *Velvet-pea.*

2. Small ſquare-podded Lotus.

Lotus ſiliqua quadrata minor.

The root is long, thick, and furniſhed with many fibres.

The ſtalks are numerous, weak, and branched: they are eight or ten inches long, of a pale green, and a little hairy.

The leaves ſtand three on a very ſhort footſtalk, and two at its baſe: they are oblong, moderately broad, of a pale green, hairy, and ſharp-pointed.

The flowers are large and yellow: they ſtand on long, ſlender footſtalks, ſometimes two together, ſometimes ſingly. In ſome places they are ſtriped, but not univerſally.

The ſeed-veſſel is long and ſlender: the ſeeds are numerous and brown.

It is common in Italy, and the ſouth of France. It flowers in July.

C. Bauhine calls it *Lotus pratenſis ſiliquoſus luteus.* Others, *Lotus quadrata ſiliqua flore luteo.*

3. Great-podded Lotus.

Lotus ſiliqua craſſiore.

The root is long, ſlender, and furniſhed with a few fibres.

The ſtalks are numerous, weak, but tolerably upright, and a foot high.

The leaves are broad, ſhort, and ſharp-pointed: they ſtand three on a footſtalk, with two at the baſe of it; and they are of a pale green, and a little hairy.

The flowers ſtand ſingly on long, ſlender footſtalks; and are large and yellow.

The pod is very large, and hangs down.

The ſeeds are large and well-taſted.

It is a native of Crete, and flowers in Auguſt.

C. Bauhine calls it *Lotus pentaphyllus ſiliqua cornuta.*

3. Cluſter-flowered Lotus.

Lotus floribus faſciculatis.

The root is long, thick, and furniſhed with numerous fibres.

The ſtalks are firm, upright, and two feet high: they are ſmooth, branched, and of a pale green.

The leaves ſtand three on a footſtalk, with two at its baſe: they are oblong, broad, ſharp-pointed, and of a pale green.

The flowers are ſeparately very ſmall; but they ſtand in thick tufts, and make a very conſpicuous ſhew: they are white, variegated with a little purple.

The ſeed-veſſel is long and ſlender, and the ſeeds are roundiſh.

C. Bauhine calls it *Lotus ſiliquoſus glaber flore rotundo.*

It is a native of the warmer parts of Europe, and flowers toward the end of ſummer.

5. Hairy, white-flowered Lotus.

Lotus hirſutus flore albo.

The roots are woody, tough, and ſpreading.

The ſtalks are alſo woody, and three or four feet high: they are very much branched, and covered with a brown bark in the lower parts, and green in the upper.

The leaves are very numerous and ſmall: they are placed three together, with ſcarce any footſtalks, and two at the baſe: they are oblong, hairy, ſharp-pointed, and of a pale green.

The flowers grow in little tufts at the tops of the branches, and are ſmall and white.

The ſeed-veſſels are ſmall alſo, and brown.

It is frequent in the ſouth of France, and flowers in Auguſt.

C. Bauhine calls it *Lotus pentaphyllus villoſus.* Others, *Trifolium hæmorrhoidale majus.*

6. Great-flowered woolly Lotus.

Lotus lanuginoſus flore majore albicante.

The root is woody, tough, divided, and ſpreading.

The ſtalks are numerous, ſhrubby, and firm; and the whole plant has a white, woolly aſpect.

The leaves ſtand three together, with two others at the baſe. This is the proper and perfect manner of their growth; but ſometimes one or both the lower ones are wanting.

They are ſhort, broad, and white, and are covered with a kind of woolly matter.

The flowers are large and white: they ſtand in little roundiſh cluſters on the tops of very ſlender footſtalks.

The ſeed-veſſel is long and ſlender: the ſeeds are roundiſh.

It is a native of all the warm parts of Europe, and flowers in July.

C. Bauhine calls it *Lotus pentaphyllus incanus.* Others, *Dorycnium Monſpelienſium*; and the Engliſh writers, *Poiſonous trefoil of Montpelier.*

7. Buſhy-top'd white Lotus.

Lotus floribus confertis albidis vel carneis.

The root is long, thick, divided, and ſpreading.

The ſtem is covered with a brown bark: it grows to the height of four feet in a ſhrubby manner, and the young twigs are greyiſh.

The leaves ſtand three together, with two ſmaller at their baſes; and they are narrow, ſharp-pointed, and of a pale green.

The flowers are ſmall, but very numerous: they ſtand in round cluſters at the tops of the

ſtalks and branches; and they are uſually white, ſometimes rediſh.

The ſeed-veſſels are ſlender and long.

It is a native of Spain, and flowers in Auguſt.

C. Bauhine calls it *Trifolium album anguſtifolium floribus veluti in capitulum conjeſtis.* Others, *Spaniſh dorycnium*, *Dorycnium Hiſpanicum*, and *Dorycnium flore minore.*

8. Long-podded Lotus.

Lotus ſiliquis longiſſimis.

The root is long and divided.

The ſtalks are numerous, firm, and not much branched.

The leaves are diſpoſed in a regular manner, and placed at agreeable diſtances on the plant: three ſtand together, and two at their baſe: they are oblong, obtuſe, and white.

The flowers are long and ſlender, and their colour is a beautiful gold yellow: three uſually ſtand together.

The ſeed-veſſel is very large, and the ſeeds are numerous and brown.

It is a native of the Greek iſlands, and flowers in Auguſt.

Plukenet calls it *Lotus argentea Cretica*; and others follow him.

9. Great ſcarlet-flowered Lotus.

Lotus flore magno coccineo.

The root is long, ſpreading, and furniſhed with numerous fibres.

The ſtalks are robuſt, upright, and brown; and the plant has a ſhrubby appearance.

The leaves are large: three ſtand on a ſhort footſtalk, and two at the baſe: they are oblong and obtuſe, and of a greyiſh green.

The flowers ſtand on ſlender footſtalks riſing from the boſoms of the leaves, two on each: they are very large, and of a beautiful ſcarlet.

The ſeed-veſſels are long and brown.

It is a native of Africa, and flowers in July.

Plukenet calls it *Lotus fruticoſior Africana foliis incanis floribus binis amplis coccineis.*

The common kinds of *lotus* are gently aſtringent. Two or three kinds have been called *hæmorrhoidales*, from their effect in ſtopping the bleeding of the piles: but their virtues in that reſpect are not very conſiderable. The Spaniſh and French kinds, called *dorycnium*, are accounted poiſonous.

Mr. Ray, by an overſight, adds to this claſs the plant called *climbing fumitory*, the *fumaria claviculis donata:* but that is properly a ſpecies of the genus whoſe name it bears, *fumaria*; and will be deſcribed in its place among the plants of that title, which belong to a different claſs.

The END of the EIGHTEENTH CLASS.

THE

Yellow Medic with flat Wreath'd Pods

Common Heart Trefoil

Little Hedge-hog Trefoil

Prickly edg'd Medic

Lucerne

Snail Trefoil

Caterpillar Trefoil

Moon Trefoil

Shrubby Moon Trefoil

Common Birdsfoot Trefoil.

Square podded Lotus

Small square podded Lotus

Great podded Lotus

Hairy white flowerd Lotus

Great scarlet flowerd Lotus

THE

BRITISH HERBAL.

CLASS XIX.

Plants whoſe fruit is a berry; conſiſting of a ſkin or rind, ſurrounding a ſoft pulpy or juicy matter, within which are the ſeeds.

NEither the flower, nor any other part of theſe herbs, needs to be named for eſtabliſhing a claſſical character; this peculiarity of the fruit being the moſt obvious, certain, and invariable mark that could be choſen. It happily keeps together the whole number of theſe plants, ſeparating them from all others: this is the deſign and ſole end of claſſical diviſions; and it has the advantage of being ſhort, plain, and ſimple; which is the beſt circumſtance that can attend them. If the characters of all claſſes were as natural as this, there would be little difficulty in forming a good and perfect ſyſtem of botany, or in the attainment of the ſcience.

Mr. Ray, and with him the generality of writers, led by nature and by reaſon, have thus conſtituted the berry-bearing plants as a diſtinct and ſeparate claſs. But it is not ſo in the method of Linnæus; for they are arranged in the moſt different and moſt remote claſſes, and ſcattered over all his work. Any one would ſay, from the ſlighteſt obſervation, and nature would confirm it from the deepeſt ſearch, that nightſhade and bryony, and lilly of the valley and Solomon's ſeal, and the reſt of theſe were allied to one another; and the ſtudent would hope he ſhould find them together. It is fit he ſhould ſo find them, and he will here: but in that author he muſt ſeek each in its ſeparate place.

Linnæus eſtabliſhed a ſyſtem in which the characters of claſſes were to be taken from the number and arrangement of the threads in the flower: therefore, where Nature, as in the preſent inſtance, fixes the character in the fruit, he rejects the diſtinction.

Accordingly nightſhade ſtands among his *pentandria monogynia*, becauſe the threads are five, and the ſtyle ſingle; and it is there mixed with henbane, and campanula, becauſe their threads are in the ſame number; and bryony is thrown among the *monœcia ſyngeneſia*, ſixteen claſſes off, becauſe there are male and female flowers in a peculiar manner on the ſame plant.

The dwarf honeyſuckle is placed among the *tetrandria*, becauſe its threads are only four, and it is there mixed with plantain. The lilly of the valley and aſparagus are ranged under the *hexandria*, becauſe of their ſix threads, and mixed among the bulbous plants. The vaccinium, becauſe its flower has eight threads, is joined with rue; the willow-herb is placed under the *octandria*, and the moſchatellina in the ſame claſs, keeps company with biſtort and arſmart.

Theſe are Engliſh plants, and familiar ones: we need carry the ſearch no farther. The purpoſe of method and ſyſtem is to introduce regularity into a ſcience; but the reſult of ſuch combinations can be only confuſion. Nature ſports and wantons in theſe leſſer parts; and therefore, though fit to be regarded in deſcription, they are moſt improper for the conſtruction of claſſical characters. No inſtance can ſhew this more ſtrongly than the ſeparation of the bacciferous plants.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this country.

GENUS I.

WHITE BRYONY.

BRYONIA.

THE flower is compoſed of a ſingle petal, hollowed like a bell, and divided into five ſegments, of an oval form, at the rim. The cup is formed of a ſingle piece, hollowed like the flower, and divided alſo into five ſegments; which are narrow, and ſharp-pointed. The fruit is a berry, of a ſomewhat oval form. There are diſtinct male and female flowers on the plant; but they agree in theſe characters. The diſpoſition of the internal part only varies: in the male flowers there are three ſtamina or threads, two of which have double buttons: and in the female there is a ſtyle from the rudiment of the fruit, which is divided into three parts at the top.

Linnæus places this among the *monœcia ſyngeneſia*, for the ſake of theſe particularities, far removing it from the other berry-bearing plants, as we have obſerved. This is an inſtance, that although the diſtribution of the internal or ſmall parts of flowers be very worthy notice, it is not a foundation for claſſical diſtinctions.

DIVISION I. BRITISH SPECIES.

1. Common White Bryony.

Bryonia alba.

The root is vaſtly large, and of a duſky whitiſh colour.

The ſtalks are numerous, weak, and trailing: they are rough to the touch, and of a pale green: they would naturally lie on the ground; but, as the plant commonly grows in hedges, they are ſupported, and will run to twelve feet in length, ſending out numerous ſpiral tendrils, by which they lay hold of every thing they come near.

The leaves are large, and of a beautiful ſhape: they are broad, cornered, and in ſome degree like thoſe of the vine, but longer pointed, and of a greyiſh green.

The flowers are numerous, ſmall, and of a greeniſh white: they are placed on ſhort foot-ſtalks, two, three, or more, on each; and theſe riſe from the boſoms of the leaves.

The berries are red when ripe, and contain a few large, oval ſeeds, which grow to the rind.

It is common in hedges. It flowers in July, and the berries ripen in Auguſt.

C. Bauhine calls it *Bryonia aſpera ſeu alba baccis rubris*. Others, *Bryonia alba*.

It is poſſeſſed of great virtues; but is violent in its operations, if not well managed.

It is excellent againſt obſtructions of the viſcera, and particularly in uterine diſorders: it promotes the menſes, and aſſiſts in bringing on delivery. It is for this purpoſe beſt given in very ſmall doſes of the juice expreſſed with white wine.

The compound water called after its name, and by the vulgar *hyſterick water*, has alſo theſe virtues, but in a leſs degree.

The juice, in a ſomewhat larger doſe, has been given with ſucceſs againſt dropſies; and a ſyrup made of it, with honey and a little vinegar, is good in aſthmas.

It kills worms in the inteſtines; and in this reſpect is ſuperior to moſt medicines. This Bartholin long ago experienced and publiſhed; but it has not been enough regarded. For this purpoſe the beſt method of giving it, is to preſs out the juice, and let it ſtand to ſubſide; then pouring off the clear part, the ſettlings are to be dried.

A ſlight infuſion of it is uſeful in hyſterick caſes, and externally it is a very good addition to cataplaſms for hard and painful ſwellings.

2. White Bryony with black berries.

Bryonia alba baccis nigris.

The root is large, like that of the common kind.

The ſtalks are numerous, weak, and climbing; and they are very rough to the touch.

The leaves are large, broad, ſhort, and of a duſky green.

The flowers are whitiſh; and the berries, when ripe, not red, as in the other, but black.

It is not a variety of the former, but a diſtinct ſpecies: the ſeeds of one will not produce the other.

It is found in hedges in ſome parts of the kingdom common enough, as about Cambridge. The berries are ripe in Auguſt.

C. Bauhine calls it *Bryonia alba baccis nigris*; a name copied by moſt others.

Its virtues are the ſame with thoſe of the former.

DIVISION II. FOREIGN SPECIES.

Cretick Bryony.

Bryonia foliis palmatis.

The root is long and ſlender.

The ſtalks are numerous, weak, trailing, and, when ſupported, of a great length.

The leaves are large, and divided in an elegant manner: they are rough, of a pale green, and veined and ſpotted with white.

The flowers are large, and they are placed on long footſtalks. The berries are red.

It is a native of Crete, and flowers in June.

C. Bauhine calls it *Bryonia Cretica maculata.*

GENUS II.

BLACK BRYONY.

TAMNUS.

There is in this genus a flower, if it may be ſo called, without petals. The cup is formed of a ſingle piece, divided at the edge into ſix ſegments, of an oval form, but pointed, and diſplayed in an expanded manner at the points. The fruit is a berry, of an oval form, divided within into three cells; in each of which there are two ſeeds.

There are in this genus male and female plants. The flowers differ in this, that in the male there are within the cup ſix ſhort filaments or threads, with their buttons; and in the female there is the embryo-fruit, plainly diſtinguiſhable under the flower.

Linnæus places this among the *diœcia hexandria*; the male and female flowers being on ſeparate plants, and the threads in the male ſix in number. He is diſpleaſed with the received name *tamnus*, and writes it *tamus*.

DIVISION I. BRITISH SPECIES.

1. Common Black Bryony.

Tamnus vulgaris.

The root is very large, long, and thick, black on the outſide, white within, and full of a white juice.

The ſtalks are numerous, long, ſlender, and green: they climb among buſhes, and by that means grow to ten feet or more in length.

The leaves are large and beautiful: they are placed on long footſtalks, and are of a heart-faſhioned ſhape, ſharp-pointed, and of a ſhining deep green.

The flowers are greeniſh, and are placed ſeveral together on long footſtalks, each having alſo its ſeparate pedicle.

The berries are large, and, when ripe, of a beautiful red.

It is common in hedges, and the berries are ripe in Auguſt.

C. Bauhine calls it *Bryonia lævis ſive nigra racemoſa.* Others, *Bryonia nigra*, and *Tamnus vulgaris.*

The root is a very powerful remedy in nephritick caſes, though not known in the ſhops, or uſed in the modern practice. The beſt method of giving it is in the juice preſſed out, when it has been bruiſed, with white wine.

This works powerfully by urine, brings away gravel, and cleanſes the paſſages in a ſurpriſing manner.

It is alſo excellent againſt obſtructions of the menſes, taken in the ſame way, but in ſmaller doſes, for a continuance of time.

A ſyrup made of it with honey is ſerviceable in aſthmas, and all obſtructions of the breaſt.

The young ſhoots, eaten in the manner of aſparagus, are very pleaſant, and work powerfully by urine.

The bruiſed root, applied externally, has done ſervice in paralytick caſes. This I write from experience; nor was it unknown of the plant to the earlier writers; though it has unhappily of later time been diſuſed.

DIVISION II. FOREIGN SPECIES.

Black Bryony with trifid leaves.

Tamnus folio trifido.

The root is long, thick, and full of a ſharp juice.

The ſtalks are numerous and weak; but they ſupport themſelves by climbing.

The leaves are large, and of a freſh green: they are broad, ſhort, and divided into three parts. Their colour is a deep, dead green.

The flowers are ſmall and greeniſh.

The berries are large and red.

It is a native of the Greek iſlands, and flowers in July.

Tournefort calls it *Tamnus Cretica trifidofolio.*

GENUS III.

HERB-CHRISTOPHER.

CHRISTOPHORIANA.

THE flower is compoſed of four petals; of a ſingular angulated form, and large. The cup is formed of four chaffy leaves; which are ſmall, obtuſe, and hollow; and they fall with the flower. The fruit is a berry, of a roundiſh ſhape, with a furrow on it. The ſeeds are numerous, and ſemicircular.

Linnæus ſeparates this from all the other berry-bearing plants, and places it among the *polyandria monogynia*; the ſtamina being numerous, and fixed to the receptacle; and the ſtyle from the rudiment of the fruit ſingle.

This author diſlikes the received name *chriſtophoriana*, and calls the genus *actæa*.

DIVISION I. BRITISH SPECIES.

Common Herb-Chriſtopher.

Chriſtophoriana vulgaris.

The root is long and thick, black on the outſide, yellow within, and of a diſagreeable taſte.

The firſt leaves are large, and divided by threes into a great many parts; ſo that they reſemble at the firſt ſight thoſe of ſome of the umbelliferous plants: they are of a duſky green, and of a gloſſy ſurface.

The ſtalk is round, green, upright, branched, and a yard high.

The leaves on this reſemble thoſe from the root: they are very large, and their ſeparate parts are broad, ſerrated, and have alſo a kind of trifid diviſion.

The flowers are ſmall and white: they ſtand in cluſters upon ſlender footſtalks, forming a kind of ſpike.

The berries are large, of a roundiſh, but ſomewhat oblong figure, and black.

It is found in woods in our northern counties.

It flowers in July, and the berries are ripe in Auguſt.

Ray calls it *Chriſtophoriana*. Others, *Chriſtophoriana vulgaris*, and *Actæa*. In Engliſh we call it *Herb-Chriſtopher*; and, from its poiſonous qualities, *Bane-berry*.

The berries have been fatal to children who have been tempted by their gloſſy black to eat them. They have died convulſed.

DIVISION II. FOREIGN SPECIES.

1. Tall American Herb-Chriſtopher.

Chriſtophoriana Americana procerior.

The root is long, thick, and of a dark brown.

The ſtalks are numerous, upright, firm, and of a pale green: they are of a firm ſubſtance, and five feet high.

The leaves have the ſame trifid diviſion with thoſe of the common kind; but they are larger, of a deep green, and ſharply ſerrated.

The flowers ſtand in very long and beautiful ſpikes at the tops of the ſtalks: they are ſmall and white.

The berries are black and roundiſh.

It is a native of Virginia, and flowers in Auguſt.

Dillenius calls it *Chriſtophoriana Americana procerior & longius ſpicata.*

2. Red-berried Herb-Chriſtopher.

Chriſtophoriana baccis rubris.

The root is long and ſlender.

The firſt leaves are numerous, and very large: they are divided by threes into ſeveral ſhort, broad ſegments, and theſe are ſerrated and ſharp-pointed.

The ſtalk is ſingle, upright, branched, and four feet high.

The leaves on this reſemble thoſe from the root, and are of a very dark green colour.

The flowers ſtand in long and thick ſpikes: they are ſmall and white. The berries are red.

It is a native of the northern parts of Europe, and of America, and flowers in Auguſt.

The berries are ſometimes white.

Moriſon calls it *Chriſtophoriana Americana racemoſa baccis nivcis & rubris.*

GENUS IV.

SOLOMON'S SEAL.

POLYGONATUM.

THE flower is formed of a ſingle petal; and is oblong, hollow, and of a bell-like ſhape, and is divided into ſix ſegments at the edge. There is no cup. The berry is round, and divided within into three cells, in each of which there is a ſingle roundiſh ſeed; and, before the berry is ripe, it is ſpotted. The leaves are narrow, and of a firm ſubſtance.

Linnæus

Linnæus places this among the *hexandria monogynia*; the threads in the flower being ſix, and the ſtyle from the rudiment of the fruit ſingle.

By this arrangement he ſeparates it from moſt others of the ſame kind by many claſſes; and, by an error of the oppoſite kind, in reſpect of the leſſer diviſion of genera, he joins this in the ſame with lilly of the valley, taking away the received name *polygonatum*, and calling all the ſpecies *convallaria*, the name he uſes inſtead of the old term *lillium convallium*.

The whole habit and general face of the plant diſtinguiſh it from the lilly of the valley. The flower alſo confirms this as a generical diſtinction; being in the *Solomon's ſeal* oblong, and in the lilly of the valley globular.

DIVISION I. BRITISH SPECIES.

1. Common Solomon's Seal.

Polygonatum vulgare.

The root is thick, and ſpreads under the ſurface.

The ſtalk is ſingle, round, and tolerably upright; but that it generally toward the top ſtoops a little: it is not at all branched; its height is a foot and half, and the leaves and flowers on it are diſpoſed with great regularity.

The leaves are oblong, broad, of a beautiful green, of a firm ſubſtance, and marked with large ribs, all running lengthwiſe: theſe generally grow on one ſide of the ſtalk, and the flowers on the other.

The flowers are ſmall, whitiſh, with a tinge of green on the edge; and they have a little ſmell: they grow two or three together on long, ſlender footſtalks, which riſe from the boſoms of the leaves; and they hang down in a continued ſeries.

The berries are large; and, when ripe, they are red; but birds are fond of them, ſo that they are rarely ſeen in this ſtate: before that time they are green and ſpotted.

We have it in ſome woods in the north of England; but it is not common. It flowers in July.

C. Bauhine calls it *Polygonatum latifolium vulgare*. Others, *Sigillum Solomonis*.

The root is greatly eſteemed as an external remedy for bruiſes.

Internally taken, it is a very powerful reſtringent. It is good againſt ſpitting of blood, and has been known to cure that troubleſome diſorder the *fluor albus*. The beſt way of taking it is in form of a conſerve, beating up the freſh root with ſugar.

The colour of the berries varies in this ſpecies; ſometimes they are only of a bluiſh green when ripe, and ſometimes they are of a deep gloſſy black.

2. Large-flowered Solomon's Seal.

Polygonatum flore majore.

The root is large, and runs obliquely and irregularly under the ſurface.

The ſtalk is round, firm, upright, and robuſt, but not ſo tall as in the common kind: it rarely exceeds a foot in height, and it does not droop as that of the common kind toward the top.

The leaves are very broad, oblong, thick, of a deep ſhining green, and marked with very thick and robuſt veins, running all lengthwiſe.

The flowers riſe from the boſoms of the leaves, and hang all on one ſide of the ſtalk: they are larger than in the other, and of a pure white: two or three hang in a cluſter from the boſom of each leaf; but every one of theſe has its ſeparate footſtalk. They have a very fragrant ſmell, like that of the hawthorn-flower.

The berries are greeniſh, and ſpotted for a long time; but, when ripe, they are black.

We have it in ſome of our woods in the northern counties; but it is ſcarce. It flowers in June, but the berries are not ripe till about Auguſt.

C. Bauhine calls it *Polygonatum latifolium flore majore odoro.*

Linnæus ſuppoſes it only a variety of the former; but it is altogether diſtinct.

3. Dwarf Solomon's Seal.

Polygonatum humile anguſtiore folio.

The root is thick, oblong, and white: it runs beneath the ſurface, and has numerous fibres.

The ſtalk is upright, of a pale green, not at all branched, and eight inches high.

The leaves are oblong and narrow: they are of a yellowiſh green, ſharp-pointed, and full of thick ribs.

The flowers grow three on each footſtalk, hanging from the boſoms of the leaves; and they are ſmall, oblong, and greeniſh.

The berries, when ripe, are blue.

It is found in mountainous woods in our northern counties. It flowers in July.

Ray calls it *Polygonatum humile Anglium.*

It is a perfectly diſtinct ſpecies from the others, though ſome have doubted it.

4. Great-leaved Solomon's Seal.

Polygonatum hellebori albi folio.

The root is thick and white.

The ſtalk is firm, upright, not at all branched, and of a deep red.

The leaves ſtand on one ſide of the ſtalk, as in the common kind; and they are very large: they are broad, ſharp-pointed, marked with thick ribs, and of a deep green.

The flowers hang on long footſtalks from the boſoms of the leaves: they are ſmall and white; and there uſually are two on each ſtalk.

The berries are large; and, when they are ripe, of a beautiful bright red.

It is found in our weſtern counties, and flowers in Auguſt.

Ray calls it *Polygonatum hellebori albi folio caule purpuraſcente.*

The flowers of this have no ſmell.

DIVISION II. FOREIGN SPECIES.

1. Branched Solomon's Seal.

Polygonatum ramoſum.

The root is compoſed of a vaſt number of thick fibres, connected to a ſmall head.

The ſtalk is round, firm, upright, and branched, and is two feet and a half high.

The leaves are very large, and of a fine deep green: they ſurround the ſtalk by a broad baſe, and grow ſmaller thence to a point.

The flowers are ſmall and whitiſh: they hang ſingly on long, ſlender, and, as it were, jointed footſtalks, riſing from the boſoms of the leaves: they are white, with a faint tinct of green.

The berries are at firſt green and ſpotted, but afterwards red.

It is frequent in Germany, and flowers in Auguſt.

C. Bauhine calls it *Polygonatum latifolium ramoſum.*

2. Narrow-leaved Solomon's Seal.

Polygonatum anguſtifolium.

The root is thick, large, and of an irregular form, and ſpreads under the ſurface.

The ſtalks are round, firm, upright, and a foot and half high: they are rarely branched, but ſometimes they divide a little.

The leaves are oblong, narrow, ſharp-pointed, and of a pale green: they do not ſtand in the manner of thoſe in the other kinds, but ſurround the ſtalks like the leaves of the ſtellate plants.

The flowers hang from the boſoms of the leaves on ſingle footſtalks, uſually one from the boſom of each leaf: they are ſmall and white.

The berries are roundiſh, and, when ripe, of a fine red.

It is a native of Germany, and flowers in July.

C. Bauhine calls it *Polygonatum anguſtifolium non ramoſum.* He diſtinguiſhes another under the name of *Polygonatum anguſtifolium ramoſum*; but it is only a variety of this.

GENUS V.

LILLY OF THE VALLEY.

LILLIUM CONVALLIUM.

THE flower is formed of a ſingle petal; and is hollow and globular. There is no cup. The berry is roundiſh, divided into three cells within, and before its growing ripe is ſpotted. The leaves are few, and nervous.

Linnæus places this among the *hexandria monogynia*; the threads in the flower being ſix, and the ſtyle from the rudiment of the fruit ſingle. He ſeparates it from the reſt of the berry-bearing plants by ſeveral claſſes, and joins it in the ſame genus with the *polygonatum*. He alſo changes the received name, writing it *convallaria*.

DIVISION I. BRITISH SPECIES.

1. Common Lilly of the Valley.

Lillium convallium vulgare.

The root is long, ſlender, ſpreading, and creeping to a great diſtance under the ſurface.

The leaves that riſe from this are uſually two, ſometimes three: they are very large, and of a fine green, oblong, broad, and ſharp-pointed; and they are of a firm ſubſtance, and marked with high and large ribs.

The ſtalk which bears the flowers riſes near the ſtem, which ſupports the leaves, and is commonly connected to it by a membranous caſe. There are no leaves on this ſtalk.

The flowers grow at the top in a kind of ſpike; but they all hang one way: they are large, of a whitiſh colour, and of an extremely fragrant ſmell.

The berries are large, round, and red.

It is common in our woods, but does not always arrive at perfection. In many places only the leaves are ſeen, the plants never flowering; and in many others the berries do not ripen.

C. Bauhine calls it *Lillium convallium album.* Others, *Lillium convallium vulgare.*

It is an excellent medicine in nervous caſes. The flowers have the principal virtue. They may be taken in infuſion; but the beſt way is in conſerve: they are thus good againſt head-achs, and all nervous complaints.

Dried and powdered, they act as ſnuff, and do great ſervice in inveterate diſorders of the head.

Ray mentions a variety of this plant, which had impoſed on ſome as a diſtinct ſpecies. The leaves in this are narrower, and the flowers ſmaller; but this is only accidental.

DIVISION II. FOREIGN SPECIES.

Oneblade.

Lillium convallium foliis cordatis.

This is a very ſingular little plant: it has been deſcribed by authors under a diſtinct name; but it is in all reſpects a true and proper *lilly of the valley*.

The root is long, ſlender, divided, and creeping.

The firſt appearance of the plant is in a ſingle leaf, ſupported on a long footſtalk: this obtained it the name *oneblade*, for when it riſes to flower it has two.

The footſtalk that ſupports the firſt leaf is re-

diſh; and the leaf ſtands flatways, not erect, upon it: it is of a heart-like ſhape, and of a deep, fine green.

The ſtalk which ſupports the flowers riſes from ſome other part of the root: it is four inches high, ſlender, rediſh, and upright. About the middle it has two leaves, placed at ſome diſtance, one over the other: they are heart-faſhioned, and of the ſame fine green: they ſurround the ſtalk at the baſe, and terminate in a point.

The flowers terminate the ſtalk in a thick, ſhort ſpike: they are ſmall, white, and of a very fragrant ſmell.

The berries are ſmall, and, when ripe, red.

It is frequent in the mountainous parts of Germany, where the ſoil is damp. It flowers in June.

C. Bauhine calls it *Lillium convallium minus*. Others, *Monophyllon*.

It has been ſaid to grow wild in ſome parts of England; but there was ſome miſtake in the account. Species are ſeldom loſt in a kingdom where they ever did grow wild; and it is not found with us now.

The root of this laſt ſpecies has been celebrated againſt the plague, but I fear upon no good foundation.

GENUS VI.

HERB TRUELOVE.

HERBA PARIS.

THE flower conſiſts of an uncertain number of petals: they are oblong, and they ſpread open. The cup is compoſed of an uncertain number of leaves, and it remains after the flower. The fruit is a berry of a roundiſh form, but ſomewhat angulated in four parts, and divided within into four cells; in each of which are two rows of ſeeds. The ſtalk is ſimple, and the leaves grow all from one point.

Linnæus places this among the *octandria tetragynia*; the threads in the flower being eight, and the ſtyles from the rudiment of the fruit being four, anſwerable to its four diviſions.

This author takes away a part of the received name: he writes it only *Paris*.

DIVISION I. BRITISH SPECIES.

Herb Truelove.

Herba Paris vulgaris.

The root creeps under the ſurface: it is long, ſlender, and has numerous fibres.

The ſtalk is ſingle, upright, not at all branched, and a foot high.

The leaves grow all from one part near the top: they are four. Their colour is a fine deep green, and they are broad and oblong.

The flower is ſingle, one only on each plant: it terminates the ſtalk, and is compoſed of four petals, and is of a greeniſh white. The cup is of the ſame colour, and is formed of four leaves.

The berry is large and black. We have it in woods, but not common. Authors call it *Herba Paris*.

The berries are recommended as good in malignant fevers internally, and as cooling in outward applications; but it is not now uſed.

Our people, who, from its leaves growing in this ſingular manner, call it *Truelover's knot*, have in ſome places an opinion of its vittue as a love-powder; but this is idle.

DIVISION II. FOREIGN SPECIES.

Triſoliate Herb Truelove.

Herba Paris triſoliata.

The root is large, thick, and tuberous, and has few fibres.

The ſtalk is round, upright, firm, not at all branched, and about a foot high.

Toward the middle there ſtand three leaves: theſe are broad, ſhort, and ſharp-pointed: they are of a firm ſubſtance; and their colour is a fine green.

The flower is ſingle, one only growing on each plant: it terminates the ſtalk, and is very large and beautiful: it conſiſts of three petals, and it ſtands in a three-leaved cup. The colour is a deep purple, and the cup is green.

The berry is very large and black: the ſeeds are numerous.

It is a native of North America, and flowers in July.

Cornutus calls it *Solanum triphyllum Canadenſe*.

No plant ſhews more perfectly or more plainly than this ſpecies of *Herba Paris*, the impropriety of Linnæus's method of forming the claſſes on the number of threads in the flower. None can doubt, nor can himſelf deny, that this is a ſpecies of the ſame genus; yet he is obliged to acknowledge, that the threads, and all the other parts of fructification, are in this one-fourth in number leſs than in the other. The threads are three, and ſo of the reſt.

The character we have given of the genus, taking in the diſpoſition of the leaves, is perfect: it admits both theſe ſpecies, and it excludes all other plants: but this no generical character can do that is formed upon the threads of the flower. We have ſhewn the ſame truth in other inſtances; but it is in none ſo ſtriking.

GENUS VII.

MARSH WHORTLE.

OXYCOCCUS.

THE flower is formed of a ſingle petal, which is hollowed like a bell, and is divided at the edge into four ſegments, which turn backwards. The cup is extremely ſmall, and remains after the flower. The fruit is a berry, of a roundiſh form, and divided into four cells. The ſeeds are few and minute.

Linnæus places this among the *octandria monogynia*, the threads in the flower being eight, and the ſtyle from the rudiment of the fruit ſingle. He joins it with the *vaccinium*; from which it differs in eſſential characters, as we ſhall ſhew when we come to the ſhrubby kinds.

The *oxycoccus* is a plant of which there is properly but one known ſpecies, and that is a native of Britain.

Marſh Whortle Berry.

Oxycoccus vulgaris.

The root creeps under the ſurface; and is long, thick, and rediſh.

The ſtalks are numerous and weak: they are very ſlender, of a purpliſh colour, not much branched, and four or five inches long: they ſupport themſelves at beſt but irregularly; and, when loaded with fruit, always lie upon the ground.

The leaves are ſmall, and of a bright green: they are broad at the baſe, ſharp-pointed; and they have no footſtalks.

The flowers ſtand on long, ſlender pedicles; and are of a faint red.

The berries are longiſh, and of a deep red when ripe.

It is found on boggy grounds in Warwickſhire, and in ſome other places, and flowers in June.

C. Bauhine calls it *Vitis idea paluſtris.*

The berries are cooling and ſubaſtringent: they will ſtop bloody ſtools, and they ſtrengthen the ſtomach.

GENUS VIII.

MOSCHATELL.

MOSCHATELLINA.

THE flower is formed of a ſingle petal, and is hollowed, and divided into four or into five ſegments at the edge. The cup is formed of a ſingle piece, and is ſplit as it were into two parts. The fruit is a round berry, growing between the cup and the flower. The ſeeds are four, and each is held in a ſeparate cell. The cluſter of flowers grows in a kind of ſquare head.

Linnæus places this among the *octandria polygynia*; the threads in the flower being eight, and the ſtyles from the fruit numerous.

This author takes away the received name of the plant, and calls it *adoxa*.

We have in this another inſtance of the uncertainty of taking characters from the number of threads in the flower. We have ſhewn this in two plants evidently of the ſame genus in the *Herba Paris*; but here we ſee it in the flowers of the ſame plant. The flower, which grows at the top of the cluſter, has the number of parts here firſt named, the ſegments being four, and alſo the threads four within; but in all the other flowers on the ſame ſtalk the ſegments are five, and the threads in the ſame manner five.

Of this, as of the former genus, there is but one known ſpecies, and that is a native of Britain.

Tuberous Moſchatell.

Moſchatellina tuberoſa.

The root is ſmall, thick, of an irregular figure, and pale brown colour.

The leaves are large, and they are ſupported on long footſtalks: they are divided rudely into three parts; and theſe are again notched into three at the ends, where they terminate obtuſely.

The ſtalks are about three inches high: they are ſlender, whitiſh, and weak.

There uſually grows a ſingle leaf on each, and that toward the middle: it is like thoſe from the root, but ſmaller, and of a paler green.

The flowers ſtand at the top in a ſhort, thick, ſquare cluſter: they are of a greeniſh colour, with a tinge of whitiſh and yellowiſh.

The berries are ſmall and rediſh.

It is frequent at the ſides of woods in the rotten earth that lies under trees. It flowers in April.

C. Bauhine calls it *Ranunculus nemorum moſchatellina dictus.*

Its virtues are unknown.



Common white Bryony



Common black Bryony



Common Herb Christopher



Tall American Herb Christopher



Red Berried Herb Christopher



Common Solomon's Seal



Large flowerid Solomon's Seal



Branched Solomon's Seal



Narrow leavid Solomon's Seal



Lilly of the Valley



One Blade



Herb Truelove

Trifoliate Herb Truelove



Marsh Whorle. Berry.

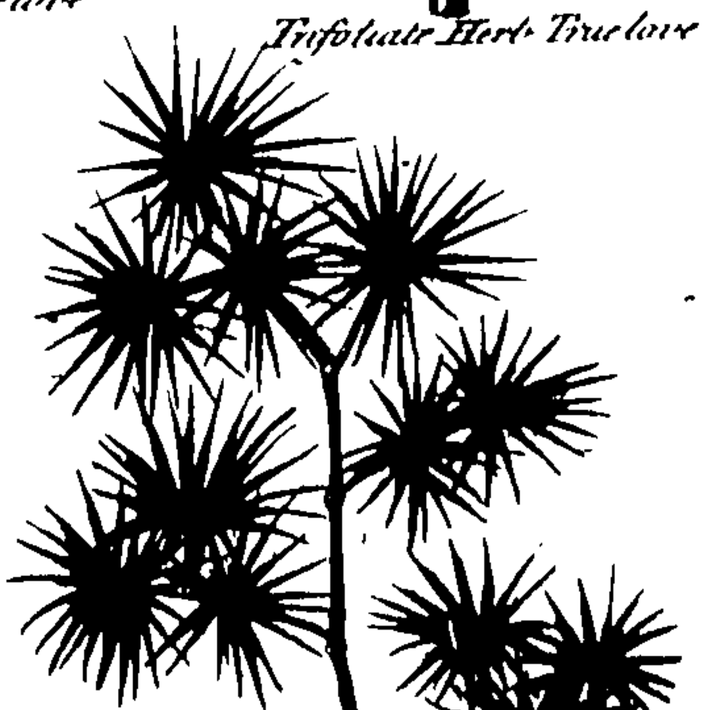
Ribbonwood Marshallo



Common Asparagus



Prickly Asparagus



Starry leaved Asparagus

GENUS IX.

ASPARAGUS.

ASPARAGUS.

THE flower is formed of a ſingle petal: this is oblong, hollow, and divided to the very baſe into ſix narrow ſegments; three of which ſtand inward, and turn back at the ends. There is no cup. The fruit is a round berry, with a dent at the top; and it is divided within into three cells, in each of which there are two ſeeds.

Linnæus places this among the *hexandria monogynia*; the threads in the flower being ſix, and the ſtyle from the rudiment of the fruit ſingle.

DIVISION I. BRITISH SPECIES.

1. Common Aſparagus.
Aſparagus vulgaris.

The root is compoſed of a vaſt number of long, thick, brown fibres.

The ſtalk is round, upright, of a pale green, and a yard high. The branches are regularly diſpoſed upon it: they begin about the middle, and grow ſhorter from thence all the way up.

The leaves are very numerous: they are extremely ſlender, and of a pale green.

The flowers are ſmall, and of a greeniſh white: they are placed on ſhort footſtalks upon the branches.

The berries are large, and of a bright red.

It is common wild about our weſtern ſea-coaſts, and flowers in July.

The young ſhoots there are thick and delicate; but in gardens culture renders them much larger and more tender.

C. Bauhine calls it *Aſparagus*. J. Bauhine, *Aſparagus hortenſis & pratenſis*; and others, *Aſparagus vulgaris*.

It is a plant of great virtues. The ſhoots, as we eat them at table, operate powerfully by urine, but the roots much more. A decoction of them is excellent againſt the gravel; and they alſo open obſtructions of the viſcera.

2. Thick-leaved Aſparagus.
Aſparagus craſſiore folio.

The root is compoſed of numerous, thick fibres.

The ſtalk is round, upright, and a yard high. The branches are regularly diſpoſed, as in the common kind.

The leaves are ſhorter and thicker; but they have no more breadth than in that.

The flowers are whitiſh, and the berries are of a bright red.

It is found in our weſtern counties near rivers that have ſalt-water from tides. It flowers in June.

C. Bauhine calls it *Aſparagus maritimus craſſiore folio*.

DIVISION II. FOREIGN SPECIES.

1. Prickly Aſparagus.
Aſparagus ſpinoſus.

The root is compoſed of numerous, thick fibres.

The ſtalks are firm, upright, round, gloſſy, of a pale green, very much branched, and five feet high.

The leaves are numerous, and of a fine deep green; four or five riſe together on different parts of the branches; and they all terminate in prickles.

The flowers are ſmall and whitiſh: they ſtand on ſhort footſtalks, and ſoon fade.

The berries are large, round, and red.

It is common about hedges in Italy, and flowers in June.

C. Bauhine calls it *Aſparagus foliis acutis*. Others, *Aſparagus ſpinoſus*, and *Corruda*.

2. Starry-leaved Aſparagus.
Aſparagus foliis faſciculatis.

The root is ſmall and fibrous.

The ſtalks are numerous, round, jointed, and of a pale green, the joints being paler than the reſt.

The leaves are long, narrow, of a deep green, and ſharp-pointed: they grow in cluſters at the extremities and on the ſides of the branches, like the rays of a ſtar.

The flowers are ſmall and greeniſh.

The berries are large and red.

It is a native of Africa, and flowers in July.

Plukenet calls it *Aſparagus Africanus tenuiſolius viminalibus virgis foliis laricis adinſtar ex uno puncto ſtellatim diſpoſitis.*

The virtues of theſe ſeveral kinds are ſaid to be the ſame with thoſe of the *common aſparagus*, but in an inferior degree.

GENUS X:

NIGHTSHADE.

SOLANUM.

THE flower is formed of a ſingle petal, deeply divided into five ſegments. The cup is made of a ſingle piece, and in the ſame manner divided into five ſegments. The fruit is a roundiſh berry. The ſeeds are numerous, and are contained in two cells.

Linnæus places this among the *pentandria monogynia*; the threads in the flower being five, and the ſtyle from the rudiment of the fruit ſingle.

DIVISION I. BRITISH SPECIES.

1. Woody Nightſhade.

Solanum lignoſum.

The root is compoſed of numerous, thick fibres.

The ſtalks are woody, but weak: they are covered with a brown bark toward the bottom; but it is paler in the tenderer parts.

The leaves are placed on long footſtalks; and they are broad, oblong, and pointed. Thoſe toward the lower part of the plant are undivided; but thoſe toward the top have one or two nicks, making a kind of ears near the baſe.

The flowers are placed in cluſters upon ſlender footſtalks: they are ſmall, and of a dark purple, with yellow heads of the threads in the middle.

The berries are large, oblong, and, when ripe, of a very fine red.

It is common in damp grounds, and flowers in July.

C. Bauhine calls it *Solanum ſcandens ſeu dulcamara.* Others, *Solanum lignoſum.*

2. Sea Woody Nightſhade.

Dulcamara maritima.

The root is compoſed of a multitude of large fibres.

The ſtalks are numerous, woody, and covered with a grey bark; and the young twigs are of a deep green.

The leaves are oblong, and irregularly dented with a few deep notches: they are of a bluiſh green.

The flowers are few and large: they ſtand in ſpreading tufts, and are of a paler blue than in the common kind, but of the ſame form.

The berries are oblong, and, when ripe, black.

We have it about the ſea-coaſts in the north. It flowers in July.

Ray calls it *Solanum lignoſum, ſeu dulcamara marina.*

The *woody nightſhade*, though of the *ſolanum* kind, has no dangerous qualities. It operates gently by ſtool, and opens obſtructions of the viſcera. The woody part of the ſtem has moſt virtue. A decoction of this is good in the jaundice.

9. Common Wild Nightſhade.

Solanum vulgare.

The root is compoſed of numerous fibres.

The ſtalk is round, green, thick, and of a firm ſubſtance: it ſpreads out into numerous branches, and is two feet high.

The leaves are placed on long footſtalks: they are oblong, broad, ſharp-pointed, and of a deep green.

The flowers are ſmall and white: they ſtand in cluſters eight or ten together, and have yellow buttons in the middle.

The berries are round, and, when they are ripe, black.

It is common in cultivated ground, and no where ſo much as in the borders of gardens. It flowers in Auguſt.

C. Bauhine calls it *Solanum bacciferum primum ſive officinarum.* Others, *Solanum vulgare*; and, from its growing in gardens, *Solanum hortenſe.*

The leaves of this kind are uſed externally as cooling and repellent; but, if not managed with caution, they may be dangerous.

DIVISION II. FOREIGN SPECIES.

1. Common Tree Nightſhade.

Solanum fruticoſum anguſtifolium.

The root is compoſed of numerous fibres.

The ſtem is firm, woody, and covered with a brown bark: the plant is a yard or more in height, and ſpreads into branches in a regular and elegant manner.

The leaves are long, ſlender, and of a beautiful green.

The flowers ſtand ſingly on ſhort footſtalks riſing from the boſoms of the leaves: they are large and white, with yellow buttons in the centre.

The berries are large, round, and of a bright fine red.

It is a native of America, and flowers in autumn.

C. Bauhine calls it *Solanum fruticoſum bacciferum.* Others, *Strychnodendron*, and *Amomum Plinii.*

2. Love-Apple.

Solanum foliis pinnatis fructu magno.

The root is compoſed of many thick fibres.

The ſtalk is thick, fleſhy, and of a pale green, but of a weak ſubſtance; ſo that it does not ſtand perfectly upright.

The leaves are very large, and of a pale green: they are of the pinnated form; each compoſed of three or four pairs of pinnæ, with an odd ſegment at the end: theſe ſeparate parts are deeply and rudely indented, and ſometimes divided again in the pinnated manner.

The flowers are large and yellow: the fruit is very large, of the bigneſs of a moderate apple, ribbed on the ſurface, and of a fine red. It is full of a ſoft pulpy ſubſtance; among which lie numerous ſeeds.

It is a native of the warmer parts of America, but thrives well in our gardens. We raiſe it principally for beauty; but in many other parts of Europe they eat the fruit in ſoops; and ſometimes raw, with oil, pepper, and vinegar.

It is innocent; but there is little nouriſhment in it.

3. Potatoe.

Solanum tuberoſa radice.

The root is compoſed of numerous, large, irregular pieces, and of certain ſtrings or fibres connecting them together.

The ſtalk is round, firm, upright, and a yard high.

The leaves are large, long, and pinnated: each is compoſed of four or five pairs of irregular pinnæ, with an odd one at the end; and they are of a duſky green colour.

The flowers are large, and of a deep purple, paler on the outſide, and duſkier within, with yellow buttons in the centre: theſe ſtand in cluſters at the ends of the branches; and have a ſingular aſpect, being five-cornered, rather than divided as the others.

The fruit is large, round, and, when ripe, black.

It is a native of America, and flowers in Auguſt.

The roots are very quick in multiplying.

C. Bauhine calls it *Solanum tuberoſum eſculentum*. Others, *Battata*.

This is another inſtance, that many plants of the *ſolanum* kind are not poiſonous, for it is truly and diſtinctly one of them.

4. Mad Apple.

Solanum pomiferum fructu oblongo.

The root is compoſed of numerous, long, thick, and ſpreading fibres.

The ſtalk is round, upright, firm, of a pale green, or of a purpliſh colour, and covered with a light, looſe, woolly matter: it is not much branched; and it is a foot and half high.

The leaves are very large: they have ſhort footſtalks; and thoſe are often rediſh, as are alſo the veins: the leaves themſelves are of a deep green; but they have the ſame kind of whitiſh, woolly matter upon them as the ſtalks.

The flowers ſtand ſingly, or ſometimes two or three together, on long footſtalks; and they are large, and either white, or of a beautiful purple. Their cups are covered with ſharp, but weak prickles, of a purple colour.

The fruit is very large: its ſhape is oval, and its bigneſs that of a hen's egg, or larger: it is greeniſh at firſt, but white like an egg when ripe; or ſometimes purpliſh, varying as the flower: it is full of a ſoft, juicy matter within; and the ſkin is extremely tender and thin.

This is another of the innocent plants of the *nightſhade* kind. Its name would make one think otherwiſe; but that has been given through ignorance.

Some early blunderers in the ſcience ſuppoſed this to be the male mandrake of Theophraſtus, and therefore declared it to be poiſonous; ſetting down the ſymptoms of convulſions and deliriums as attending the taking it inwardly. The people in the Eaſt, not ſo deeply learned in Greek, eat it, and they have ſet the example to other nations. It is now a common ingredient in ſoops in many places.

It is a native of Aſia, Africa, and South America. Scarce any warm climate is without it.

C. Bauhine calls it *Solanum pomiferum fructu oblongo*. Others, *Meolongena*, and *Melanzana*. Our Engliſh people, who follow the old botaniſts, *Mad apples*, and *Raging apples*. Others, the *Egg-plant*.

Tournefort has led the way to deſcribing the ſeveral varieties of this plant as diſtinct ſpecies; but they are no way different, except in the colour of the flower and fruit: no more than a red bean from a white one.

5. Pear-fruited Nightſhade.

Solanum ſpinoſum fructu pyriformi.

The root is compoſed of many thick, long, and ſpreading fibres.

The ſtalks are numerous, weak, branched, and two feet and a half high: they are covered with a looſe, whitiſh, woolly matter; and are beſet at ſmall diſtances with ſharp prickles.

The leaves are large, and covered with the ſame white downy matter: they are alſo beſet with ſharp prickles: they are broad, ſhort, pointed at the ends, and irregularly indented.

The flower is ſmall; but the fruit is very large: it is of the bigneſs of a pear, and of a gold yellow: its ſhape alſo is like that of a pear; but it grows to the ſtalk at the large end.

It is common in the American iſlands, and the fruit ripens in Auguſt.

Plukenet calls it *Solanum Barbadenſe ſpinoſum annuum fructu aureo rotundiore pyri parvi inverſi forma & magnitudine.*

6. Blue-flowered Thorny Nightſhade.

Solanum ſpinoſum flore cæruleo.

This is a very ſingular and elegant plant.

The root is compoſed of numerous, ſpreading fibres.

The ſtalks are round, firm, upright, branched, and a yard high: they are of a pale colour, and thick ſet with ſharp, duſky thorns.

The

The leaves ſtand on thorny and long foot-ſtalks: they are large, and deeply ſinuated at the edges; and have alſo numerous ſharp thorns on their ribs.

The colour is a deep green.

The flowers are numerous: they ſtand at the tops of the ſtalks on ſlender pedicles, and are deeply divided into ſegments, and of a fine blue.

The fruit is round, and, when ripe, black.

It is a native of America, and flowers in July.

Plukenet calls it *Solanum annuum nigricans Virginianum ſpinoſiſſimum flore cæruleo.*

7. Prickly Nightſhade with ſmooth cups.

Solanum ſpinoſum calycibus lævibus.

The root is compoſed of numerous, ſpreading fibres.

The ſtalk is firm, upright, prickly, and not much branched: the thorns are ſtiff, and very ſharp; and they ſtand ſtrait.

The leaves are long, and conſiderably broad: they have ſhort footſtalks, they are deeply ſinuated at the edges, and they have ſome prickles on them.

The flowers ſtand on long, ſlender, prickly footſtalks; and they are large and blue.

The berries are round, black, and gloſſy.

It is a native of the warmer parts of America and Aſia, and flowers in July.

Dillenius calls it *Solanum Indicum ſpinoſum flore boraginis.*

8. Apple of Sodom.

Solanum ſpinis recurvis flore cæruleo.

The root is long, thick, and furniſhed with many fibres.

The ſtalks are numerous, upright, branched, of a pale yellowiſh brown colour, and woody ſubſtance, and four feet high: they are armed with ſhort and robuſt prickles, which bend ſomewhat downwards.

The leaves are long, and conſiderably broad: they have very ſhort footſtalks; and they are deeply divided at the edges in the pinnated form: they are of a dark green; and they have alſo prickles on them.

The flowers ſtand on long footſtalks, ſometimes ſingly, ſometimes many together: they are large, and of a ſky-blue. The fruit is large, round, and black.

It is a native of many parts of the Eaſt, and flowers in July.

Plukenet calls it *Solanum pomiferum frutescens officinarum ſpinoſum nigricans boraginis flore foliis profunde laciniatis.* It is called *apples of Sodom* from the place.

The fruit has a tempting aſpect; but, when chewed, the taſte is very diſagreeable.

9. Bahama Nightſhade.

Solanum anguſtifolium ſpinoſum.

The root is compoſed of numerous, thick fibres.

The ſtalk is woody, firm, upright, not much branched, and five or ſix feet high: it is armed with thorns; but they are ſhort, and not very numerous.

The leaves are numerous, long, narrow, of a beautiful green, and fixed on ſhort footſtalks: they are very lightly waved on the edges, and they have prickles along the middle rib.

The flowers are large and beautiful: they are of a fine pale blue, with a tinge of purple; and have yellow buttons in the centre.

The berries are ſmall, round, and black.

It is a native of the Bahama iſlands, and flowers in Auguſt.

Dillenius calls it *Solanum Bahamenſe ſpinoſum petalis anguſtis reflexis.* The flower is ſometimes white or fleſh-coloured.

The qualities of theſe foreign *nightſhades* are not perfectly known; but, upon the whole, this genus has a much worſe character than it deſerves. *Nightſhade* in general is accounted poiſonous; but, as we have ſhown with reſpect to moſt of the ſpecies, there is little reaſon for ſuch a character. The opinion ſeems to have ariſen from confounding the plant next to be deſcribed under the ſame name.

That is indeed poiſonous; and having, by a latitude of ſpeech, been called *nightſhade*, all the reſt have been ſuppoſed of the ſame qualities.

GENUS XI.

DEADLY NIGHTSHADE.

BELLADONA.

THE flower is formed of a ſingle petal, and is deep, hollowed, and very lightly divided into five ſegments at the edge. The cup is made of a ſingle piece, divided into five equal ſegments; and it remains when the flower is fallen. The fruit is a round berry, placed in the cup. The ſeeds are kidney-ſhaped.

Linnæus places it among the *pentandria monogynia*; the threads in the flower being five, and the ſtyle from the rudiment of the fruit ſingle. He takes the received name from the plant, and calls it *atropa.*

DIVISION I. BRITISH SPECIES.

Deadly Nightſhade.

Belladona dicta ſolanum Lethale.

The root is long, large, and creeping.

The ſtalks are numerous, firm, upright, and branched: their colour is brown toward the bottom, and higher up a pale green.

The leaves are numerous, very large, and of a fine ſtrong green: they are long and broad, pointed at the ends, but not indented at the edges.

The

The flowers ſtand on ſingle footſtalks riſing from the boſoms of the leaves; and they are large and conſpicuous: they are hollow, and of a deep, but not ſhining purple colour.

The berry is large, round, and black: it has a tempting look, and many have been by that led to eat of it to their deſtruction.

It grows in the neighbourhood of towns and houſes, on ground where there has fallen manure; but it ſhould be rooted out wherever found, for children have been often deſtroyed by it. It flowers in July.

C. Bauhine calls it *Solanum melanoceraſus*. Others, *Solanum Lethale*, and *Belladona*.

The works of medical authors abound with inſtances of its effects, and hiſtories of thoſe who have periſhed by it; and experience from time to time ſhews they have told truth.

I ſaw one unhappy inſtance in the year 1743: a labourer found it in the park of a nobleman where he was repairing the pales; and he eat heartily of the berries, and gave ſome to his children. The ſymptoms came on in the following manner.

The man, after two hours, grew light-headed, giddy, and unable to ſtand; but not thinking of the cauſe, ſet down to his ſupper. He drank greedily, but could ſcarce ſwallow any thing ſolid. He went to bed, and preſently grew worſe. He complained of a dreadful pain in the breaſt, and difficulty of breathing. It was about five in the afternoon he eat the berries. Theſe ſymptoms came on between ten and eleven at night; and at twelve, ſeven hours from the eating them, he fell into the moſt dreadful ravings. Once in a quarter of an hour his ſenſes would return for a moment; but he relapſed immediately, and every time with more violence. During the intervals of reaſon, his breath was as difficult; and he complained of a dreadful *tightneſs acroſs his breaſt*. Toward morning the ravings went off, but he became fooliſh He was faint, breathed with difficulty, and ſtared and ſlabbered, anſwered foreign to queſtions, and ſeemed one born an idiot. All this time he was affected with a moſt painful and violent ſtrangury; but by degrees this went off, and he recovered without the help of medicines. Before the country-apothecary could be had, he was growing better; and he not knowing what to adviſe, left the family to their own management.

The children both died in the courſe of the night; and he, when perfectly recovered, and queſtioned about the nature of the caſe, anſwered, that he had been in the condition of one very drunk; but ſaw and underſtood all that was doing even when he anſwered in the wildeſt manner.

This I have ſeen; and what is recorded by medical writers agrees well with it. Indeed no claſs of writers are in general more faithful. We read of men who have continued in a ſtate of madneſs eight or nine days from it, and have recovered: to children it has generally proved fatal. Thoſe grown perſons who have periſhed by it, have generally died within twelve hours from the eating.

DIVISION II. FOREIGN SPECIES.

Large violet-flowered Deadly Nightſhade.

Belladona flore magno violaceo.

The root is compoſed of numerous, thick fibres.

The ſtalk is round, firm, upright, and of a browniſh colour, not much branched, but full of leaves: theſe are oblong, and of a deep green, not dented at the edges, but ſharp-pointed: they have ſhort footſtalks, and a rim of the leaf runs down them.

The flowers are large, and of a fine violet-colour: they are placed ſingly on ſhort footſtalks riſing from the boſoms of the leaves.

The fruit is a large berry, placed in the cup; which is alſo large, and in a manner cloſes over it.

It is a native of Peru, and flowers in Auguſt.

Juſſieu calls it *Alkakengi flore amplo violaceo*; but it is truly of this kind.

GENUS XII.

CUCKOWPINT.

ARUM.

THere is not in all the round of Nature a genus ſo ſingular as this, nor any about which ſyſtem-makers have had more trouble, none knowing where to place it: yet had they followed the obvious character impreſſed by Nature in the fruit, the confuſion had been avoided; for whatever diſputes may have ariſen from the ſingularity of the flower, the fruit is a berry: that admits no doubt, and that places it in this claſs.

The flower has no petals, but numerous threads. The cup is formed of a ſingle leaf; and is large, hollow, upright, pointed at the top, and coloured within: it falls with the flower. The fruit is a cluſter of round berries. The ſeeds are numerous and roundiſh. The leaves are undivided.

This is a character of the genus compriſed in a few words; yet punctual, particular, and above exception. It plainly diſtinguiſhes the *arum* from all other plants, even from two genera nearly allied to it, and to be deſcribed hereafter, *ariſarum* and *dragons*.

Linnæus ſeparates it from the generality of the other berry-bearing plants, placing it among the *gynandria polyandria*; the ſtamina being numerous, and fixed to the piſtil of the flower. He joins the *ariſarum* and *dracontium* with it.

DIVISION I. BRITISH SPECIES.

Common Cuckowpint.

Arum vulgare.

The root is a roundiſh, tuberous lump, brown on the outſide, and white within, placed at a conſiderable depth under the ſurface, and furniſhed with a few fibres.

The leaves are placed on long, thick footſtalks; and they are very large, and of an arrow headed ſhape, ſplit deep at the baſe, and ſharp at the point: they are of a fine freſh green, and are often ſpotted with black, and ſometimes with white ſpots.

The ſtalk riſes in the midſt of theſe, and is ſurrounded by the hollow baſes of their footſtalks: it is round, thick, and ten inches high: on its top ſtands a ſingle flower. The thready part at the bottom is yellowiſh: the receptacle, which is lengthened out in form of a club, is red, purple, or white; for theſe are accidental varieties.

The berries are of a fine bright red.

It is common under hedges, and flowers in May.

C. Bauhine and others call it *Arum vulgare*, and *Arum maculatum*.

Some have deſcribed the ſpotted kind as a diſtinct ſpecies; but the variety is altogether accidental.

It is a very powerful and excellent medicine. It operates by urine, and is good againſt the gravel.

A piece of it bruiſed and laid upon the tongue, has reſtored the ſpeech in paralytick caſes; and a conſerve of it, made with two-thirds ſugar, has done eminent ſervice in the ſcurvy, and in rheumatiſms.

The virtues of it are leſs known than they ſhould be, from this ſingle circumſtance, that it is commonly uſed dry. It loſes all its efficacy with its juice; and this the taſte manifeſts. Nothing is more acrid than the freſh root; but when dry it is inſipid.

DIVISION II. FOREIGN SPECIES.

1. Ægyptian Arum.

Arum Ægyptiacum.

The root is very large, tuberous, and of an irregular form; of a rediſh brown on the outſide, white within, and of an acrid taſte, but not ſo violently ſharp as our *arum*.

The leaves grow ſingly on long, thick footſtalks: they are very large, of a deep ſhining green, and of a ſhape ſomewhat approaching to heart-faſhioned: they are broad at the baſe, and are there very lightly and bluntly indented: they are from this part gradually ſmaller to the end, where they terminate obtuſely; and the ſtalk is not inſerted at the edge, but in the ſubſtance of the leaf, a third below the top.

The ſtalk which ſupports the flower is round, thick, juicy, and of a pale green.

The flower reſembles that of our *common arum*. The cup is a great, oblong, hollow caſe: the club within is white, and of an uneven ſurface; and the thready part is yellow.

The berries are large and red.

It is a native of Ægypt, and of the Greek iſlands. It rarely flowers.

C. Bauhine calls it *Arum maximum Ægyptium quod vulgo Colacaſia*. Others, *Arum Ægyptium*, and *Colacaſia*.

The root is eaten in Ægypt, and other parts of the Eaſt, as food; and it is not confined in this uſe to the place where it naturally grows, but ſold into other countries. The ſharpneſs of its taſte goes off by ſoaking in water, or by drying: either way ſerves to prepare it for the table. What Bontius writes of its being poiſonous, has no other meaning than that it is acrid. Three days ſoaking in water, he ſays, takes off all its ill qualities; and this, or a much ſhorter time, is found perfectly well to prepare it for food pleaſantly and wholeſomely.

2. Arrow-leaved Arum.

Arum foliis anguſtis ſagittatis.

The root is brown, large, tuberous, and furniſhed with a few thick fibres.

The leaves are numerous; and they are placed on long, ſlender footſtalks: they are of a perfect arrow-headed ſhape, oblong, ſlender, ſharp-pointed, ſplit at the baſe, and with ſharp points alſo to the beards.

The flower riſes upon a ſlender green ſtalk, and is contained in a hollow caſe or cup: this is green on the outſide, yellowiſh within, and highly ribbed.

The club is uſually yellow, ſometimes white or purple.

The berries are red.

It is common in the American iſlands, and flowers in April.

Plukenet calls it *Arum minus ſagittariæ foliis*.

GENUS XIII.

BUTCHERS BROOM.

RUSCUS.

THE flower has no petals. The cup is compoſed of ſix ſmall leaves, of an oval form, convex, and turned at one edge: three of theſe ſtand inward, and have by ſome been miſtaken for petals of a flower. The fruit is a round berry, divided within into three cells, in each of which are two

ſeeds;

ſeeds. There are in this genus ſeparate male and female flowers on diſtinct plants: but they differ only in this, that the male flowers have certain buttons, though without threads, and the female an oblong rudiment of the fruit.

Linnæus places this among the *diœcia ſyngeneſia*; the flowers being male and female on ſeparate plants, and the buttons growing together in a body: but he is obliged to acknowledge, that there are in ſome ſpecies, which he cannot diſpute to be of this genus, flowers which have the male and female parts together. This ſhews the generical diſtinction he has eſtabliſhed to be imperfect, and the claſſical character falſe; but theſe things we have often obſerved.

Common Butchers Broom.
Ruſcus vulgaris.

This is a tough and ſhrubby plant, though of no conſiderable height or bigneſs.

The root is long, thick, and ſpreading.

The ſtalk is round, firm, upright, a foot and half high, and divided into many branches toward the top.

The leaves are very numerous and ſmall: they are of a bluiſh green colour, and of a firm ſubſtance: they are broadeſt at the baſe, narrower to the point, where they end in a ſharp prickle, and not at all ſerrated.

The flowers are ſmall, and of a greeniſh white: they ſtand upon the leaves, one on each, and uſually near the centre.

The berry is large, and of a beautiful red.

We have it on waſte grounds. It flowers early in ſpring.

C. Bauhine calls it *Ruſcus*. Others, *Ruſcus ſive Bruſcus*. We, *Knee-holly*, and *Butchers broom*.

The root is a powerful and excellent diuretick: the beſt way of giving it is in decoction. It thus is ſerviceable in the gravel, and all nephritick complaints, and againſt obſtructions of the viſcera. Cures of dropſies have been performed by this medicine alone; but it muſt be taken early, otherwiſe there is little hope.

GENUS XIV.

DWARF HONEYSUCKLE.

CHAMÆPERICLYMENUM.

THE flower is compoſed of four petals, of an oblong form. The cup is ſmall, and is divided into four ſegments at the edge. The fruit is a large berry, of an uneven ſurface, compoſed of ſeveral ſmaller round ones.

Linnæus places this among the *tetrandria monogynia*, joining it with the *cornus*, but improperly.

There is but one known ſpecies of this genus, and that is common to Britain, and the other northern parts of Europe.

Dwarf Honeyſuckle:
Chamæpericlymenum.

The root is long, ſlender, and ſpreading: it runs under the ſurface, and is furniſhed with many fibres.

The ſtalk is round, ſlender, upright, and about five inches high.

The leaves are placed in pairs: they are large, oblong, broad, pointed at the ends, not at all divided at the edges, and marked with high ribs: they have no footſtalks, and their colour is a bluiſh green.

The flower ſtands at the top of the ſtalk; but there uſually riſe two little ſhoots from the ſame point; each of which has two or four leaves on it like the others.

The flower is large and white.

The fruit is compoſed of ſeveral little berries joined together, and is of a fine red.

The whole plant, as it decays, often becomes rediſh.

We have it on hills in the northern parts of the kingdom. It flowers in May.

C. Bauhine calls it *Periclymenum tertium ſive humile*. Others, *Chamæpericlymenum*. It obtained this name, the Engliſh of which is *Dwarf honeyſuckle*, from thoſe who ſaw the fruit, and not the flower.

GENUS XV.

CLOUD BERRY.

CHAMÆMORUS.

THE flower is compoſed of five large, obtuſe petals; and is ſingle on each plant, terminating the ſtalk. The cup is divided into five ſegments, and remains after the flower. The fruit is a large berry, compoſed of many ſmaller, placed upon a convex head.

Linnæus places this among the *icoſandria polygynia*; the threads being numerous, and growing to the cup; and the ſtyles being alſo numerous, one riſing from the rudiment of every ſucceeding grain of the fruit. This author joins it with the *common bramble*; from which it differs in the flower, being ſingle on the top of every plant, and in other obvious circumſtances.

1. The Cloud Berry.

Chamæmorus.

The root is long, ſlender, and creeping: it runs under the ſurface, and has numerous fibres.

The ſtalk is round, weak, and about ten inches high.

The leaves are large, and deeply divided: they ſtand alternately, and there are not more than four or five on the whole plant: they are placed on long footſtalks, and uſually hang drooping: they are broad, ſhort, deeply divided into ſeveral ſharp ſegments, and thoſe again ſub-divided, or deeply ſerrated. Their colour is a blackiſh green on the upper ſurface, and whitiſh underneath.

The flower ſtands at the top of the ſtalk, and is large and purple.

The fruit, when ripe, is red; and it is of the bigneſs of a raſpberry, which it greatly reſembles in its external ſhape.

We have it on the northern mountains. It flowers in June.

C. Bauhine calls it *Chamærubus foliis ribes Anglicus*. Others, *Chamæmorus*, and *Vaccinium nubis*. Our common people, *Cloud-berries*, and *Knot-berries*.

2. Wild Raſpberry.

Chamæmorus fructu parvo.

The root is ſlender and creeping.

The ſtalk is weak, round, whitiſh, and a foot high.

The leaves are placed on long footſtalks, three on each; and they are oblong, broad, ſerrated, and ſharp-pointed. Their colour is a duſky green on the upper ſide, and they are paler underneath.

The flowers grow two or three together on ſlender footſtalks at the top of the plant: they are large, and of a pale red, mixed with white.

The fruit is ſmall, but that is owing to the few grains of which it is compoſed, for they are ſingly as large as in the other: there are about three to each fruit; and they are red.

It is common on the northern mountains of England, and flowers in June.

C. Bauhine calls it *Chamærubus ſaxatilis*. Others, *Rubus Alpinus humilis*, *Rubus ſaxatilis*, and *Rubus Alpinus tricoccus*.

The fruit of this is eſteemed excellent againſt ſcorbutick complaints. It may be eaten freſh, or made into a kind of conſerve. The people, where it is common, relate wonders of the cures it has performed in the worſt caſes.

SERIES II.

FOREIGN GENERA.

Thoſe of which there is no ſpecies native of this country.

GENUS I.

PRICKLY BINDWEED.

SMILAX.

THE flower has no petals. The cup is compoſed of ſix leaves; which are oblong, and have the points turned back, and unite ſo as to form a kind of wide, open bell. The fruit is a round berry, divided within into three cells, in each of which there are two ſeeds. There are male and female flowers on ſeparate plants in this genus; but they are of the ſame ſtructure, except that the male flower has ſix ſhort threads with their buttons, and the female has an oval rudiment of the fruit, on which are three ſtyles.

Linnæus places it for this reaſon among the *diœcia hexandria*, ſeparating it by many intermediate claſſes from the generality of the other berrybearers.

1. Red-berried Smilax, with angulated ſtalks.

Smilax lævis baccis rubris caule angulato.

The root is long, ſlender, and furniſhed with numerous fibres.

The ſtalks are weak, and brown: they ſupport themſelves by means of tendrils, and by that means run to a vaſt length; and they are prickly.

The leaves are large and heart-faſhioned: they have ſlender footſtalks, and they are of a beautiful green. Both the footſtalks and the ſubſtance of the leaves are prickly.

The flowers are ſmall and whitiſh: they ſtand in great numbers on the tops of the ſtalks.

The berries are ſmall, but of a beautiful red.

It is a native of Italy, Sicily, and many other of the warmer parts of Europe, and flowers in Auguſt.

C. Bauhine calls it *Smilax aſper fructu rubente*. Others,



Woody Nightshade



Common wild Nightshade



Common tree Nightshade



Love Apple



Potatoe



The Mad Apple



Pear fruited Nightshade



Blue flowerid thorny Nightshade



Prickly Nightshade with smooth Cups

Apple of Sodom



Bahama Nightshade



Deadly Nightshade



Common Cuckow Pint



Egyptian Bean



Brown Indian Bean



common Dutchess Broom



Dwarf Honeysuckle



Wood Berry



Wild Raspberry

Others, *Smilax aſpera*. The berries are ſometimes black, and the plant is in other places found with fewer prickles. In theſe conditions it has been deſcribed as two diſtinct ſpecies; but the difference is only accidental.

2. The Sarſaparilla Plant.

Smilax aſpera foliis ovatis.

The root is extremely long and ſlender: it ſpreads to a vaſt extent, and is brown on the outſide, and white within.

The ſtalks are numerous, weak, and ſlender: they ſupport themſelves by tendrils, and run to the height of twelve feet.

They are brown, and ſet with prickles.

The leaves have no prickles: they have ſlender footſtalks; and they are of an oval figure, but ſharp at the point: they are of a firm ſubſtance; and their colour is a deep green on the upper ſide, and pale underneath

The flowers grow in cluſters at the tops of the ſtalks; and are ſmall, and of a yelloviſh white.

The berries are as large as a black cherry, and when ripe they are of the ſame colour.

It is a native of South America, and of ſome parts of the north. It flowers in July.

C. Bauhine calls it *Smilax aſpera Peruviana ſive Sarſaparilla*. Others, *Sarſa*, *Zarza*, and *Zarza nobiliſſima*.

Its root is a very celebrated remedy in the ſcurvy. It has been greatly recommended in the cure of the venereal diſeaſes: but the ready effects of mercury have ſuperſeded all other medicines for that purpoſe.

It operates by ſweat; and the beſt method of taking it is in a ſtrong decoction. This ſhould be continued for a conſiderable time.

3. The China Plant.

Smilax foliis oblongo-cordatis floribus umbellatis.

The root is large, and of an irregular form.

The ſtalk is round, jointed, weak, and uſually crooked from joint to joint, and armed here and there with a few prickles: it ſupports itſelf among buſhes, climbing by means of tendrils, and in that manner runs to a great height.

The leaves are large, and of a figure very much approaching to round: they are ſmalleſt at the baſe, and are a little dented in the heart-like manner at the end.

The flowers are ſmall and yellow: they ſtand in a kind of little umbells, about four in each.

The berries are large; and, when ripe, they are of an orange red.

It is a native of China and Japan. It flowers in July.

Plukenet calls it *Fruticulus convolvulaceus ſpinoſus ſinicus floribus parvis umbellatis*. Others ſimply, *China*.

The root poſſeſſes the ſame qualities with *ſarſaparilla*. They uſed to be given together againſt the venereal diſeaſe, and at preſent are preſcribed in diet-drinks againſt ſcorbutick complaints. It was ſuppoſed to poſſeſs virtues that it had not; and thence is grown much into diſuſe, the common practice neglecting thoſe it really has.

There is a root brought from America called *baſtard China*, which belongs to a plant of this kind, but with longer leaves.

GENUS II.

BERRYBEARING ANGELICA.

ARALIA.

THE flower is compoſed of five petals, of an oval form. The cup is very ſmall, and is divided by five indentings at the edge. The fruit is a round berry, ſtriated, and crowned at the top, containing a ſingle oblong, hard ſeed. The flowers are diſpoſed in little umbells; and the leaves are divided in the manner of the common umbelliferous plants.

Linnæus places this among the *pentandria pentagynia*; the threads in the flower being five, and the ſtyles in its centre the ſame number.

Berrybearing Angelica.

Aralia racemoſa & ramoſa.

The root is long, thick, and furniſhed with many fibres.

The ſtalk is round, upright, very much branched, and five feet high: it is purple toward the bottom, and at the joints; elſewhere of a pale green.

The leaves are very large, and each is compoſed of numerous, ſmaller, perfect parts, reſembling ſo many diſtinct leaves: theſe are oblong and broad; largeſt at the baſe, ſmaller to the point, ſerrated at the edges, and of a pale green.

The flowers ſtand in little cluſters on footſtalks riſing from the boſoms of all the leaves from the top to the bottom of the plant: they are ſmall, and of a yelloviſh white.

The berries are green at firſt, but when ripe of a duſky red.

It is a native of North America, and flowers in Auguſt.

Van Royen calls it *Aralia ex alis floriſera*. Others, *Panaces Carpimon*.

GENUS III.

MANDRAKE.

MANDRAGORA.

THE flower is formed of a ſingle petal; which is hollow, and divided deeply into five ſegments. The cup is large, formed of a ſingle leaf, of a hollow ſhape, marked with five ridges, and divided alſo into five ſegments at the edge. The fruit is a berry, but a very large one, of a round or longiſh form; and the ſeeds are numerous, and kidney-ſhaped.

Linnæus places this among the *pentandria monogynia*; the threads being five, and the ſtyle from the rudiment of the fruit ſingle. There is but one known ſpecies of this ſingular genus.

The Mandrake.

Mandragora.

The root is large, long, and thick; and uſually from about the middle downwards is divided into two parts. This however is not its conſtant or certain form: ſometimes it is divided into three or four parts, and ſometimes it is abſolutely ſingle.

The leaves are numerous, and very large: they are long, and conſiderably broad, ſmall at the baſe, wideſt toward the middle, and thence gradually narrower to an obtuſe point: they are often waved, and ſometimes indented at the edges. Their colour is a dark, duſky green; and they have a very unpleaſant ſmell.

The ſtalks which ſupport the flowers riſe among theſe leaves; and they are very ſlender, about four inches high, and of a pale green: each ſupports a ſingle flower. This is large, hollow, and of a whitiſh colour, with a bluſh of purple.

The fruit is of the bigneſs of a ſmall apple, and is of a ſpungy ſubſtance. Its colour is a greeniſh yellow when unripe; but as it ripens all the green goes off, and it becomes perfectly yellow.

It is a native of Spain and Italy, and of the other warmer parts of the world, growing in damp woods. It flowers in June.

C. Bauhine calls it *Mandragora fructu rotundo.* Others, *Mandragoras mas.*

No plant has been a ſource of more error or impoſition than this.

The fruit is ſometimes of an oblong ſhape, inſtead of round; and in that condition the plant is called the *female mandrake*; but it is only an accidental variety.

It is pretended that the root perfectly repreſents the human body; and cheats have carved a head and arms to it. Good ſculpture has in ſome authors alſo greatly helped this reſemblance; but in nature it is really nothing.

The fruit of the *mandrake* has been accounted poiſonous; but without any juſt reaſon. It may be eaten with ſafety in the manner of the large fruits of ſome of the *ſolanums*; but it is unpleaſant.

The leaves are cooling, and are uſed in ointments for that purpoſe. The outer bark of the root is dried for the ſervice of medicine, but is at preſent little regarded: it has the character of a narcotick; but it has no very powerful effects.

Thoſe people who ſhew the root of *mandrake* ſeldom get that of the right plant. Their cuſtom is, to cut a piece of white bryony into the intended ſhape, and put it into the ground again for ſome time, where it will often get a kind of coat.

The interpreters of the Bible have been cenſured for rendering the Hebrew *dudaim*, *mandrake*; and much learned ignorance has been ſent into the world upon the ſubject. But there ſeems no reaſon for farther conjecture than the plain ſenſe of the words; nor any error in the Septuagint, though the miſtakes of commentators have fancied ſo. They have been led to gueſs other fruits muſt have been meant, becauſe they thought that of the *mandrake* poiſonous. But that is a palpable error: many have eaten the fruits, and any one may without hurt. This plant therefore is innocent: it grows abundantly in that part of the world where the ſcene of the ſcripture-ſtory lies; and its virtue was ſuppoſed to be that of cleanſing the uterus, and aſſiſting conception. This might naturally lead the female Iſraelite to eat it; and the whole account is plain, familiar, and evidently a literal truth.

GENUS IV.

MAY-APPLE.

PODOPHYLLUM.

THE flower is compoſed of nine petals; which are of a roundiſh form, hollow, and folded at the edge. The cup is a kind of leafy ſcabbard, falling with the flower: it is compoſed of three large, hollow leaves, of an oval form. The fruit is a berry, of an oval ſhape, with a crown at its top. The ſeeds are numerous and roundiſh.

Linnæus places this among the *polyandria monogynia*; the threads being numerous, and fixed to the receptacle, and the ſtyle from the rudiment of the fruit ſingle. The name is by moſt written *anapodophyllum.*

Common

Common May-apple.

Podophyllum vulgare.

The root is long, ſlender, and creeping: it runs juſt under the ſurface, and has numerous fibres annexed to it.

The ſtalk is round, upright, firm, of a yellowiſh colour, and about a foot high.

It is naked to the top; where it divides uſually into two parts, and on each of theſe is ſupported a ſingle leaf.

This is very large, of a roundiſh form, but divided down to the ſtalk into about ſix ſegments. The colour is a yellowiſh green, and the ſubſtance firm.

The flower riſes in the midſt between theſe two parts of the ſtalk; and has a ſlender pedicle of an inch long.

It is large and white.

The fruit is oblong, large, and of an orange-colour when ripe.

It is a native of North America, and flowers in May.

Authors in general call it *Anapodophyllum Canadenſe.*

GENUS V.

WINTER-CHERRY.

ALKEKENGI.

THE flower is formed of a ſingle petal; which is hollowed, large, folded, and divided at the edge into five broad, pointed ſegments. The cup is formed of a ſingle leaf; and is of a bloated ſhape, and divided alſo toward the edge into five pointed ſegments: it is of a pentangular form, and remains with the fruit. The berry is roundiſh, and is contained in the cup, which becomes very large, cloſes about it, and acquires a colour. The ſeeds are numerous, kidney-ſhaped, and compreſſed.

Linnæus places this among the *pentandria monogynia*; the threads in the flower being five, and the ſtyle from the rudiment of the fruit ſingle. He calls the genus *phyſalis.*

1. Common Winter-Cherry.

Alkekengi vulgare.

The root is ſlender, and creeps under the ſurface.

The ſtalk is round, upright, a foot and half high, and divided into ſeveral branches.

The leaves are placed two at a joint, on long footſtalks; and they are large, and of a fine deep green: they are broadeſt at the baſe, narrower to the point, and undivided at the edges.

The flowers are placed on ſlender footſtalks in the boſoms of the leaves: they are large and white.

The fruit ſucceeds; and makes a ſingular appearance: it is a red berry of the bigneſs of a cherry, and is ſurrounded by a kind of bag or bladder formed of the cup; which ſwells for that purpoſe, and acquires a red colour.

It is a native of the warmer parts of Europe, and flowers in June.

C. Bauhine calls it *Solanum veſicarium.* Others, *Alkekengi.*

The berries are celebrated for many virtues; but the preſent practice neglects them: they operate by urine, and are good againſt obſtructions of the viſcera; but as we have ſo many more powerful medicines for the ſame intentions, they are not worth much regard.

2. Sleepy Nightſhade.

Alkekengi floribus confertis.

This, though called a *nightſhade*, is properly a ſpecies of *winter-cherry*. The difference is not ſo great, that we ſhould wonder old authors, leſs accurate than we in the characters of the genera, did not perceive it.

The root is long and thick.

The firſt leaves are very large, broad, ſhort, obtuſely pointed, and ſupported on ſhort footſtalks: their colour is a deep green.

The ſtalk is round, upright, and two feet high: toward the top it uſually divides into ſeveral branches.

The leaves are placed on ſhort footſtalks, and reſemble thoſe from the root: they are alſo of a duſky green on the upper ſide, but paler underneath.

The flowers grow in cluſters round the ſtalk at the joints; and they are ſmall, and of a yellowiſh white.

The berry is ſmall and red: it remains in the cup, where it is defended by a woolly matter.

It is a native of the warmer parts of Europe, and flowers in July.

C. Bauhine calls it *Solanum ſomniferum verticillatum.*

It is accounted poiſonous; but outwardly is in common uſe in Spain to promote ſleep. The leaves are bruiſed for this purpoſe, and laid on the temples.

3. Woolly Winter-Cherry.

Alkekengi foliis lanuginoſis.

The root is long, thick, and furniſhed with many fibres.

The ſtalk is firm, woody, and divided into branches.

The leaves are placed on ſlender footſtalks; and they are ſhort, broad, obtuſe, of a whitiſh colour, and of a woolly ſurface.

The flowers ſtand ſingly on long footſtalks riſing from the boſoms of the leaves; and they are ſmall, and of a very pale rediſh colour.

The berry is large, and of a coral red.

It

It is a native of Curaſſo, and flowers in Auguſt.

Plukenet calls it *Solanum veſicarium Curaſſavicum Solano antiquorum ſimile, foliis origani ſubincanis.*

4. Many-flowered Hoary Winter-Cherry.

Alkekengi multiflorum foliis hirſutis.

The root is long, thick, and furniſhed with a few fibres.

The ſtalk is round, firm, upright, and two feet high: it is of a greyiſh colour, and is covered lightly with a hoary matter.

The leaves are placed on ſlender footſtalks: they are alſo of a greyiſh green, hoary, and undivided at the edges: they are broadeſt toward the middle, and pointed at the end.

The flowers are placed on ſlender footſtalks, which riſe in great numbers from the boſom of every leaf; and they are ſmall, and of a faint purple.

The berry is ſmall and red, and it is contained in a ſkinny cup.

This is accounted poiſonous, and is ſuppoſed to be the true *ſolanum ſomniferum* of the antients; but their deſcriptions are ſo imperfect, that it is hard to determine that matter.

Alpinus calls it *Solanum ſomniferum antiquorum.* Others, *Solanum ſomniferum verum.*

GENUS VI.

FRYARS COWL.

ARISARUM.

THE flower has no petals. The cup is very large, long, hollow, not upright, as in *arum*, but bending down toward the upper part, and ſplit: the club within it reſembles that of the *arum*, but it is alſo bent. The threads of the flower ſupport ſquare buttons. The berries are numerous, roundiſh, and ſet in a cluſter.

Linnæus places this among the *gynandria polyandria*; the threads being numerous, and fixed to the piſtil. But he confounds it with the *arum*, making it only a ſpecies of that genus; whereas it evidently differs generically.

1. Broad-leaved Ariſarum.

Ariſarum latifolium.

The root is a ſmall, roundiſh, tuberous lump, with a few fibres at the top.

The leaves are ſupported ſingly on long, ſlender footſtalks; and they are of a lively green, very large, oblong, heart-faſhioned at the baſe, and pointed at the end.

The flower riſes on a ſeparate ſtalk in the centre of the tuft of leaves, and reſembles that of the common arum: it is a great greeniſh cup, purple toward the top and at the edges; and it bends down, and ſplits at the extremity; within this is ſeen a purple club, which alſo bends forward.

The berries are ſmall and red.

It is common in Spain and Italy, and flowers in June.

C. Bauhine calls it *Ariſarum latifolium.*

2. Narrow leaved Ariſarum.

Ariſarum anguſtifolium.

The root is a ſmall, roundiſh lump, brown on the outſide, and white within.

The leaves are long, narrow, and of a freſh beautiful green.

The ſtalk riſes among theſe; and is ſlender, upright, of a pale green, and about ten inches high: there generally are wrapped about this the remains of the baſes of ſome leaves.

The flower ſhews itſelf in a ſingular manner. The cup is long and ſlender; and the club is alſo very long, bent downward, and crooked: its colour is a duſky purple; and it uſually thruſts itſelf out of the cup in ſuch manner as to reſemble a large earth-worm crawling.

The berries are round and ſmall, green at firſt, but when ripe of a fine red.

It is a native of the warmer parts of Europe, and flowers in June.

J. Bauhine calls it *Ariſarum anguſtifolium*; a name moſt others have followed.

The roots of theſe are very powerful diuretics; but they are not much uſed except by the peaſants.

GENUS VII.

DRAGON.

DRACONTIUM.

THE flower has no petals. The cup is large, hollow, and formed of a ſingle leaf. In this ſtands a club, in the ſame manner as in the *arum*; and the buttons of the flower, and rudiments of the berries, are at the bottom. The fruit is a cluſter of berries, numerous, large, and red. The leaves are divided in the manner of fingers.

Linnæus places this among the *gynandria monogynia*, the buttons being numerous, and fixed to the piſtil.

This author makes it a ſpecies of *arum*, reſerving the name *dracontium* for a diſtinct genus, altogether unlike the plant to which this name has been appropriated; and comprehending ſome ſpecies uſually called *arum*. The ſtudent will from this avoid the confuſion.

1. Common



Red berried Smilax with angulated Stalks



The Sarsa-parilla plant



The China plant



Berry bearing Angelica



Mandrake



May Apple



Common winter Cherry



Sleepy Nightshade



Woolly mullein Cherry



Many flowered hairy winter Cherry



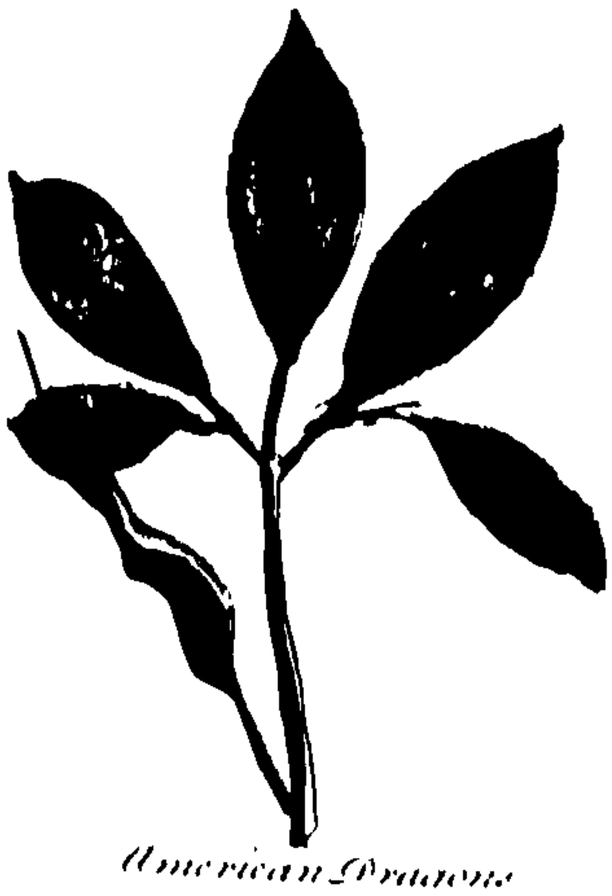
Broad leaved Arracarum



Narrow leaved Arracarum



Common Dragons



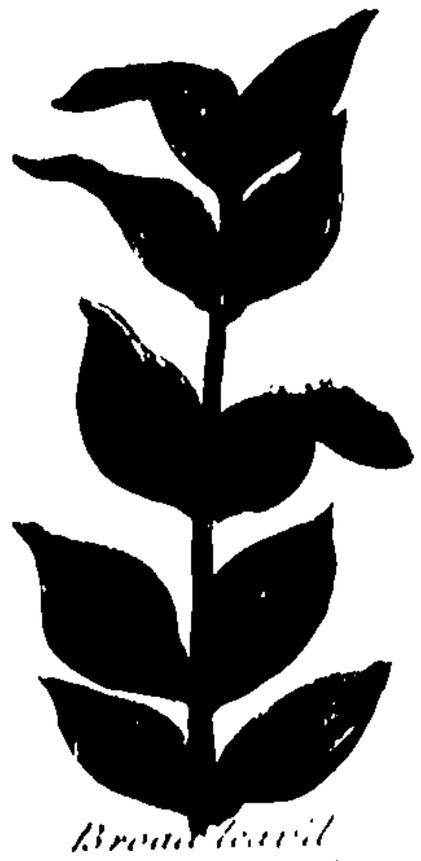
American Dragons



Water Dragons



Bay leaved Alexandrian Laurell



Broad leaved Alexandrian Laurell

1. Common Dragon.

Dracontium vulgare.

The root is large, thick, and furniſhed with numerous and ſpreading fibres.

The firſt leaves are very large, and very beautiful: they are placed ſingly on long, thick footſtalks; and are of the palmated kind, formed of numerous, long, and moderately broad ſegments, diſpoſed like fingers on a hand.

The ſtalk riſes among theſe; and is round, upright, thick, of a ſpungy ſubſtance, and four feet high.

The leaves on this are placed ſingly on very long footſtalks, and reſemble thoſe from the root, being compoſed of many ſegments, and of a beautiful green.

The flower is very large, and is placed ſingly at the top of the ſtalk. The cup is green on the outſide, but of a deep and beautiful purple within. The club is very large, and of a fine red, ſometimes white.

The berries are placed together in a large cluſter, and are red when ripe.

The ſtalk of this ſpecies is uſually of a whitiſh colour, ſtained and ſpeckled in a curious manner, like the ſkin of a ſerpent, with purple and green: it thence obtained the name.

It is a native of the warmer parts of Europe, and flowers in Auguſt.

C. Bauhine calls it *Dracunculus polyphyllus*. Others, *Dracontium*.

We cultivate it in gardens for its ſingularity and its virtues. It has the credit of being a powerful ſudorifick and reſiſter of poiſon; but it is not much regarded in the preſent practice.

2. American Dragons.

Dracontium Americanum ſpadice longiſſima.

The root is compoſed of a thick head, from whence riſe many long creeping fibres.

The firſt leaves are ſupported on long footſtalks; and they are of the palmated kind: each is compoſed of about ſeven oblong and broad ſegments, reſembling ſo many ſeparate leaves; and theſe are of a pale green.

The ſtalk is round, upright, and a foot high.

The leaves on this perfectly reſemble thoſe from the root; but they are ſmaller: they are alſo of a paler green.

The flower ſtands at the top; and is formed of a ſhort, hollow caſe, with a very long club riſing up far beyond its top, and terminating in a ſmall point.

The berries are numerous, large, and, when they are ripe, of a fine red.

It is a native of America, and flowers in May.

Herman calls it *Arum polyphyllum minus & humilius*. Others, *Dracontium Americanum*.

GENUS VIII.

CALLA.

THE flower reſembles that of the *arum*, and has no petals. The cup is compoſed of a ſingle leaf, of an oval ſhape,. but pointed, and coloured. The club is upright, ſhort, and hid among the buttons and rudiments of the fruit. This is a cluſter of round berries, in which are contained many oblong, obtuſe ſeeds.

Linnæus places this among the *gynandria polyandria*; the threads in the flower being numerous, and fixed to the piſtil.

Water Dragon.

Calla aquatica.

The root is long, thick, and jointed: it runs obliquely in the mud in ſhallow waters, and ſends up numerous leaves from various parts.

Theſe riſe in cluſters; and are ſupported ſingly on long, thick footſtalks: they are broad, ſhort, of a heart-faſhioned ſhape, ſharp-pointed, and of a deep green.

The ſtalks are round, thick, and upright, of a pale green, and about ſix inches high: they riſe in the middle of the tuft of leaves, and are ſurrounded by the baſes of ſeveral of them at the bottom: they are from thence nicked to the top, where there ſtands the cup, formed of a ſingle leaf, and ſplit to receive the ſtalk. This is of a pale green, and remains with the fruit. The club riſes within this; but it is ſhort, and hid among the threads, which are whitiſh, with yellow buttons.

The berries ripen in a ſmall cluſter, and, when ripe, are of a fine red.

It is common in the ditches in Holland, and flowers in May.

C. Bauhine calls it *Dracunculus radice arundinacea*. Others, *Dracunculus aquaticus*.

GENUS IX.

ALEXANDRIAN LAUREL.

HIPPOGLOSSUM.

THE flower has no petals. The cup is compoſed of ſix oval, convex leaves; three of which ſtand inward, and three outward; and it is placed on the under ſide of the leaf. The fruit is a round berry, divided into three cells within, and containing in each two ſeeds of a roundiſh figure.

Linnæus places this among the *diæcia ſyngeneſia*, making it a kind of *ruſcus*; but the ſituation of the flowers is a ſufficient diſtinction; and the difference is confirmed by the general aſpect of the plant.

1. Long-leaved Alexandrian Laurel.

Hippogloſſum fructibus ſub foliolis longifolia.

The root is compoſed of numerous fibres, thick, long, crooked, entangled one among another, and penetrating to a great depth.

The ſtalks are numerous, firm, tough, woody, branched, and ſpreading: they are four feet high, and in the whole uſually form a large buſh.

The leaves are large, of a firm ſubſtance, and fine deep green: they are long, but conſiderably broad, ſmall at the baſe, broadeſt toward the middle, and ſharp at the point; and they are marked all the length with large longitudinal veins.

On the middle of each leaf there grows another ſmall one; and under this riſes the pedicle, which ſupports the flower; ſometimes there is only one, ſometimes the ſtalk ſplits, and ſupports one on each diviſion.

The footſtalk is ſlender and ſhort.

The flower is ſmall and yellowiſh.

The berries are large, round, and, when ripe, of a fine red.

It is common in damp foreſts in the warmer parts of Europe, and flowers in June.

C. Bauhine calls it *Laurus Alexandrina fructu pediculo inſidente.* Others, *Hippogloſſum vulgare*, and *Hippogloſſum mas.*

What is called the *female hippogloſſum* is only a variety of this, not a diſtinct ſpecies, differing only in ſize and in the colour of the fruit, which inclines to orange. The Latin name ſhould be tranſlated *Alexandrian bay*, not *laurel*: but cuſtom has rendered it otherwiſe; and the name upon the whole is too bad for amendment. It is fit the reader know theſe vulgar names of plants with the more proper.

2. Broad-leaved Alexandrian Laurel.

Hippogloſſum latifolium fructu folio inſidente.

The root is compoſed of numerous, thick, and ſpreading fibres.

The ſtalks are woody, tough, and of a pale green colour, but ſlender, and ſeldom much branched.

The leaves are broad and ſhort: they are of a pale green, and have high ribs running lengthwiſe; and they terminate in a ſharp point.

The flower is ſmall and greeniſh: it grows to the middle of the leaf, and is of a pale, greeniſh, yellow colour.

The berry is round, large, and, when ripe, of a fine red.

It is a native of the warmer parts of Europe in woods and damp thickets. It flowers in May.

C. Bauhine calls it *Laurus Alexandrina fructu folio inſidente.*

Both kinds have the credit of being excellent vulneraries; but they are rarely uſed. Theſe ſort of medicines in general owed their credit to fancy, rather than to any real virtues; and a better knowledge of ſurgery has now baniſhed their uſe.

The END of the NINETEENTH CLASS.

THE

THE

BRITISH HERBAL.

CLASS XX.

Plants which have a perfect flower, of a plain and regular ſtructure; and have one ſeed after every flower, ſtanding naked in the cup.

THIS is a claſs plainly diſtinguiſhable by Nature from all others, but confounded, like too many of the reſt, by the modern ſyſtems of botany. The two eſſential requiſites to a generical character are, that it be certain, and that it be obvious: the firſt prevents error, the other perplexity; and there is no where in Nature a character more happily eſtabliſhed to anſwer theſe purpoſes than in the preſent inſtance.

Mr. Ray, who followed Nature cloſely, perceived it; and has founded one of his claſſical diſtinctions upon it. He has therefore kept together theſe plants, ſo truly allied, and ſo perfectly ſeparated from all others: but thoſe who have limited themſelves for the claſſick characters ſolely to the threads in the flowers of plants, have thrown the genera, thus connected together by Nature, into many different parts of their works, and joined them with plants to which they have no affinity.

Linnæus led the way to this, compelled by the very foundation of his ſyſtem: but when that author ſaw the neceſſity of thus ſeparating plants evidently joined by Nature in the courſe of his enquiry, he ſhould have given up the method, not violated her laws. No plants have ſhewn the great conſtraint his ſyſtem lays upon Nature equally with theſe, which are thus, by means of the ſingle ſeed, claſſed ſo eaſily and ſo regularly.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this country.

GENUS I.

VALERIAN.

VALERIANA.

THE flower is formed of a ſingle petal, hollowed, and crooked at the bottom, and divided into five ſegments at the edge. The cup is very ſmall, and is divided in an extremely ſlight manner into five ſegments: in ſome ſpecies the diviſion is ſcarce perceptible. The ſeed is naked, ſingle, and of an oblong form, and winged with down. The leaves ſtand in pairs.

In ſome ſpecies the outer ſkin of the ſeed is looſe; and in theſe leſs accurate obſervers have ſpoke of a ſeed-veſſel, ſuppoſing this ſkin a capſule; but their difference from the reſt is more than this.

Linnæus places this genus among the *triandria monogynia*; the threads in the flower being three, and the ſtyle from the rudiment of the fruit ſingle. But he is obliged to acknowledge vaſt variations in ſome of the ſpecies in this reſpect; ſuch indeed as ſpeak very plainly the impropriety of the ſyſtem he has eſtabliſhed. In ſome ſpecies there are but two threads in the flower, in others there is only one,

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in the generality three. In all theſe caſes the plants have the threads and the ſtyle in the ſame flower; but in others there are diſtinct male and female flowers. All this Linnæus acknowledges; and he owns alſo, that the plants are all ſpecies of *valerian*. Let us reaſon on this with impartiality. The having one, two, or three threads, is, according to this author, the mark for plants belonging to one or another claſs: therefore, as he allows all the ſpecies in which theſe differences are found to be ſtill *valerians*, all plants of one and the ſame genus, it follows, that, according to his method, the ſeveral ſpecies of the ſame genus may belong to different claſſes. This needs no remark. The ſpecies of *valerian* ſhould, according to this author, have been placed aſunder in four diſtinct claſſes: this appears by their parts, and by his characters; both invariable, and incompatible with one another. His ſyſtem, therefore, is not conformable to nature or reaſon.

The author was himſelf ſenſible of this; for he has not made different genera of theſe ſeveral *valerians*, but has placed them all together under one head in his claſs of *triandria*, following by force the method of Nature in keeping them together, though to the everlaſting diſgrace of his ſyſtem.

DIVISION I. BRITISH SPECIES.

1. Great, ſmooth Water Valerian.

Valeriana aquatica glabra maxima.

The root is compoſed of numerous, thick fibres, and ſends out ſeveral creeping branches juſt under the ſurface.

The firſt leaves are large, and beautifully pinnated: each is compoſed of five or ſix pairs of pinnæ, fixed to a ſlender, rediſh midle rib, with an odd one at the end: they are of a pale green, oblong, ſomewhat broad, ſlightly indented at the edges, and ſharp-pointed.

The ſtalk is round, upright, firm, ſtriated, rarely at all branched, and five feet high.

The leaves ſtand on it in pairs in a regular and beautiful manner: they are pinnated like thoſe from the root; and they are of a pale green.

The flowers ſtand at the tops of the ſtalks; and are ſmall, and of a pale, but elegant fleſh-colour: they are placed in large, round tufts, like umbells.

The ſeeds are ſmall, oblong, and winged with down.

It is common by waters, and flowers in July.

C. Bauhine calls it *Valeriana ſylveſtris major*; a name moſt others copy; but it is improper, becauſe it does not diſtinguiſh it from a ſpecies next to be deſcribed, which ſhould be known diſtinctly, becauſe of its great virtues. It will be better therefore to call it the *great, ſmooth water valerian*, and in Latin *Valeriana aquatica glabra maxima*.

2. Wild Valerian.

Valeriana ſylveſtris montana.

The root is compoſed of numerous, thick, whitiſh fibres; and is of a very ſtrong and diſagreeable ſmell, and of a pungent taſte.

The firſt leaves are placed on ſlender footſtalks; and they are compoſed of five, ſix, or more pairs of pinnæ: they are of a duſky green, ſlightly notched at the edges, and hairy.

The ſtalk is firm, upright, ſtriated, and a yard high.

The leaves ſtand in pairs, and are pinnated like thoſe from the root; but they are compoſed of more numerous pinnæ: there are eight or more pairs on each; and they are narrow, ſerrated, ſharp-pointed, and of a faint green.

The flowers ſtand at the tops of the ſtalk in a large umbel: they are ſeparately very ſmall; and their colour is white, with a faint tinge of fleſh-colour.

The ſeeds are ſingle, naked, and winged with down.

It is common on heaths, and near woods, and flowers in Auguſt.

C. Bauhine calls it *Valeriana montana ſylveſtris major*. Rivinus, *Valeriana ſylveſtris folio anguſtiore*.

This is a plant of very great virtues. The root poſſeſſes them in the higheſt degree; and it is to be gathered before the herb riſes into a ſtalk, and dried for uſe: after this it may be given in powder or tincture.

It is excellent againſt nervous complaints. It cures inveterate headachs, tremblings, palpitations of the heart, vapours, and all that train of miſerable diſorders included under the name of *nervous*. It is alſo good in hyſterick caſes, greatly promoting the menſes. Epilepſies have been cured ſolely by this medicine.

Fabius Columna, an author of great knowledge and ſtrict veracity, gives a great account of its virtues as experienced by himſelf; and the late Dr. Douglas took pains to revive its uſe, to the advantage of mankind. It is by his recommendation reſtored to the ſhops, and makes a very conſiderable article in modern preſcription for thoſe caſes.

3. Small Wild Valerian.

Valeriana ſylveſtris minor.

The two former ſpecies have the firſt leaves that riſe from the root, pinnated like thoſe on the ſtalk; but in this and ſeveral others they are perfectly different.

The root is long, ſlender, and furniſhed with many fibres: it ſends off a kind of ſhoots near the head, which run under the ſurface; and from theſe riſe tufts of leaves in ſeveral places.

Theſe leaves, which riſe immediately from the root, or from its underground ſhoots, are broad, oblong, of a freſh green, and placed ſingly on long, ſlender footſtalks.

The ſtalk is upright, ſtriated, of a pale green, and a foot high.

The leaves on this are beautifully pinnated: each is compoſed of five or more pairs of ſlender, oblong pinnæ, fixed to a middle rib, with a larger at the end; and they are of a pale green, ſmooth, and not indented at the edges.

The flowers ſtand at the top of the ſtalk, and alſo on ſhort footſtalks riſing from the boſoms of the upper leaves, in great regularity; and they

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are of a pale fleſh-colour: ſingly they are ſmall, but the tufts of them are large and beautiful.

The ſeed is ſmall, and ſingle: it ſtands naked, and winged with down.

It is common in meadows, and flowers in July.

C. Bauhine calls it *Valeriana paluſtris minor*. Others, *Valeriana ſylveſtris minor*.

4. Little-flowered Marſh Valerian.

Valeriana paluſtris floribus minimis.

The root is compoſed of numerous, thick fibres.

The firſt leaves are placed ſingly on long, ſlender footſtalks; and are oblong, undivided, and of a duſky green.

The ſtalk is upright, ſtriated, not at all branched, of a pale green, and two feet high.

The leaves on it are placed oppoſite, and pinnated: the pinnæ are narrow; and the colour is a pale green.

The flowers ſtand in tufts at the top of the ſtalks; and they are very ſmall, and of a faint fleſh-colour.

The ſeeds are large, ſingle, oblong, and winged with down.

It is common in boggy places, and flowers in July.

Ray calls it *Valeriana ſylveſtris ſive paluſtris minor altera*.

All theſe ſpecies agree in their nature and qualities with the ſecond kind; but they poſſeſs them in an inferior degree. The great care muſt be, not to gather by miſtake one of them for another. This ſingle caution may prevent the error, that theſe grow in wet places, and that always in dry upland ground.

DIVISION II. FOREIGN SPECIES.

1. Garden Valerian.

Valeriana hortenſis major.

The root is long and thick: it runs obliquely under the ſurface, and ſends out many fibres.

The firſt leaves riſe in tufts on a kind of thick ſhoots from the main root: theſe are placed ſingly on long, ſlender footſtalks; and they are oblong, moderately broad, narrow at the baſe, obtuſe at the end, not at all divided at the edges, and of a ſtrong and pleaſant green.

The ſtalk is round, upright, firm, and of a pale green: it is not ſtriated, as in the wild kinds.

The leaves on this are placed in pairs; and they are large, pinnated, and of a paler green; each is compoſed of about four pairs of pinnæ, with an odd one at the end of the rib; and theſe are narrow, pointed, and undivided at the edges.

The flowers grow in large tufts at the top of the ſtalk, and of ſhoots riſing from the boſoms of the upper leaves; and they are of a pale red.

The ſeed is ſingle, large, and downy.

It is a native of Alſace, but is kept in gardens for its virtue. It flowers in Auguſt.

C. Bauhine calls it *Valeriana hortenſis*; and moſt others copy that name. Some call it *phu*.

The root is good againſt vertigoes, pains in the head, and other nervous complaints. It is recommended alſo greatly againſt malignant fevers. The freſh root, given in decoction, operates by urine, and is good againſt obſtructions of the viſcera. For nervous complaints it is beſt given in powder; but the root of our *common wild valerian* is greatly ſuperior to it for this purpoſe.

2. Red Valerian.

Valeriana floribus rubris caudatis.

The root is long, thick, and brown; and has a few large fibres.

The firſt leaves are oblong, broad, and of a greyiſh green: they have no footſtalks; and they are ſmooth, undivided at the edges, and pointed at the end.

The ſtalk is round, upright for two-thirds of its height, and of a greyiſh green: toward the top it uſually bends, which is owing to its ſlenderneſs, and to the weight of the tufts of flowers.

The leaves are placed on it in pairs; and they are oblong, broad, and of a bluiſh green: they have no footſtalks: they are undivided at the edges, and pointed at the ends.

The flowers grow in great cluſters at the top of the ſtalk, and at the extremities of ſhoots riſing from the boſoms of the leaves: they are of a beautiful red: their tubular part is very long and ſlender, and terminates in a kind of ſpur.

The ſeed is ſingle, oblong, and winged with down.

It is common wild in Italy on barren hilly ground, and upon walls. It flowers in Auguſt.

C. Bauhine calls it *Valeriana rubra*. Others, *Valeriana rubra Dodonæi*.

3. Narrow-leaved Small Valerian.

Valeriana minor anguſtifolia.

The root is long, thick, brown, and furniſhed with many fibres.

The firſt leaves riſe in a ſmall tuft; and are ſupported on ſhort footſtalks: theſe are continued to the baſes of the leaves, and appear to be only that part extended in length.

They are oblong, narrow, and of a freſh green, ſharp-pointed at the end; and uſually there is one indenting on the ſide, and no more.

The ſtalk is round, weak, and of a pale green: it is ten inches high, rarely branched, and ſcarce upright, the top uſually bowing.

The leaves on this reſemble thoſe from the root; but they are narrower: they have no footſtalks. Their colour is a pale, yellowiſh green; and they have one or two indentings.

The flowers ſtand in cluſters at the tops of the ſtalk, and of ſhoots from the boſoms of the leaves; but they are not ſo numerous as in the preceding kinds: they are ſmall, and of a pure white.

The ſeed is oblong, ſingle, and winged with down.

It is a native of the rocky mountains of Germany, and flowers in July.

C. Bauhine calls it *Nardo Celtico ſimilis inodora*. Others, *Valeriana ſaxatilis*, and *Valeriana Alpina anguſtifolia*.

4. Celtick Spikenard.

Valeriana foliis ovatis obtuſis.

It was with reaſon C. Bauhine named the laſt deſcribed ſpecies as reſembling the *Celtick ſpikenard*; for they are ſo like in their general aſpect, that a common eye might take them for the ſame plant; though, on a cloſer examination, they are found to differ widely.

The root of *Celtick ſpikenard* is very long, thick, and brown: it runs obliquely into the ground; and has numerous, large, and long fibres: and its ſurface is covered with a brown ſcaly matter, the remains of footſtalks of former leaves: it is of a fragrant ſmell, as is alſo the whole plant.

The firſt leaves riſe in a conſiderable tuft: they are of an oblong form, but approaching to oval: they have long baſes, which ſerve as footſtalks; and they are broad, and obtuſe at the ends, not at all indented at the edge, and of a fine green.

The ſtalks are weak, ſlender, round, of a pale green, and ſix or eight inches high.

The leaves on theſe are oblong, narrow, obtuſe, not at all indented, and of a fine ſtrong green.

The flowers ſtand at the top in ſmall, but thick tufts; and they are of a beautiful pale red, reſembling that of a damaſk roſe.

The ſeeds are ſmall, oblong, and winged with down.

It is common in France, Spain, and Italy. It flowers in July.

C. Bauhine calls it *Nardus Celtica Dioſcoridis*. Others, *Nardus Celtica*.

The root is celebrated as a cordial and ſudorifick: it is a warm and gentle medicine; and, taken for a continuance in tincture or powder, it ſtrengthens the ſtomach, prevents flatulencies, and opens obſtructions of the viſcera.

GENUS II.

LAMBS LETTUCE.

VALERIANELLA.

THE flower is formed of a ſingle petal, which is tubular at the bottom, and crooked, and at the edge is divided into five ſegments. The cup is very ſmall, and lightly indented in five places at the rim. The ſeed is ſingle, naked, and is not winged with down.

Linnæus places this among the *triandria monogynia*; the threads in the flower being three, and the ſtyle from the rudiment of the fruit ſingle. But he improperly joins it with the valerian; whereas not only the habit and general aſpect of the plant perfectly differs, but the ſeed has no down; which is an eſſential, determinate, and properly generical character.

1. Common Lambs Lettuce.

Valerianella vulgaris caule dichotomo.

The root is ſmall, oblong, and furniſhed with a few fibres.

The firſt leaves riſe in a cluſter, and are of a faint pale green: they have no footſtalks: they are oblong, moderately broad, ſmooth, undivided at the edges, and rounded at the end.

The ſtalk is upright, weak, ſlender, and ten inches high: it runs up ſingle about half its height, and there ſplits into two parts; and each of theſe divide again once or more in the ſame manner; ſo that the top is ſpreading and flat.

The leaves ſtand in pairs; and are oblong, and obtuſe at the end: they have no footſtalks, and they are of a faint green.

The flowers are very ſmall, and white, with a ſlight tinge of blue: they ſtand in ſmall, thick tufts at the tops of all the diviſions of the ſtalk.

The ſeeds are ſingle, ſmall, and naked.

It is common in corn-fields, and wild in gardens. It flowers in May.

C. Bauhine calls it *Valeriana campeſtris inodora major*. Others, *Valerianella*, *Lactuca agnina*, and *Locuſta*.

The young leaves are eaten in ſallads, and have a pretty, but rather inſipid taſte: they are very wholeſome.

The leaves of this plant vary extremely: naturally they are as here deſcribed, undivided at the edges, and obtuſe at the end; but in a ſtarved ſoil they will be narrower, ſharp-pointed, and ſerrated; and ſometimes they are divided more deeply. Theſe, and other accidental varieties of a like kind, have been deſcribed by authors as diſtinct ſpecies; but the ſtudent muſt avoid thoſe errors.

2. Great-ſeeded Lambs Lettuce.

Valerianella ſemine magno.

The root is ſmall and fibrous.

The firſt leaves are oblong, broad, obtuſe, large, and of a pale green.

The ſtalk is a foot high, ſlender, whitiſh, and upright, and divided at the top in the ſame manner as in the common kind, always by ſplitting into two.

The leaves ſtand in pairs; and they are oblong and ſharply ſerrated, and of a faint green.

The flowers ſtand in ſmall, thick tufts, and are little and white, with a very ſlight tinge of blue.

The ſeeds are ſingle and large; and they have a ſwelled look: one follows every flower.

It is common in corn-fields, and flowers in July.

Moriſon calls it *Valerianellæ vulgaris ſpecies major ſerotina*; and Ray takes the ſame name.

That author mentions alſo a ſmall kind, with ſerrated leaves; but that, as we have obſerved before, is only a variety. This is a diſtinct ſpecies. The whole aſpect and ſize of the plant, and its late flowering, ſhew this; and it is confirmed by the ſhape, ſize, and ſwelled look of the ſeed, which is an abſolute and invariable character.

GENUS III.

SEA-LAVENDER.

LIMONIUM.

THE flower is compoſed of four petals: theſe are oblong, narrow at the bottom, and broad at the top; and they unite ſo as to form an oblong, ſlender tube. The cup to each flower is ſmall, formed of a ſingle leaf, tubular, and wide at the mouth: it is not divided, but is folded at the edge. There is beſides this a common or general cup, ſerving to many flowers, and containing a long ſeries of them. This is of an imbricated form. The ſeed after every flower is ſingle, naked, and contained in the cup.

Linnæus places this among the *pentandria pentagynia*; the threads in the flower being five, and the ſtyles from the rudiment of the ſeed the ſame in number.

This author confounds the *ſea lavender* with *thrift*. He takes away the generical name *limonium*, and makes all theſe plants ſpecies of *ſtatice*: but there is an abſolute and eſſential diſtinction in the general cup, which ſupports that in the form and univerſal aſpect. Thus Nature confirms her obvious differences, and thus this author has confounded them; not heedleſsly, for he names this very difference, acknowledging, that while the common cup of the *limonium* contains a great number of flowers in a long ſeries, and is ſimple, and of an oblong form; that of *ſtatice* is triple, and comprehends them in a round cluſter. This we ſhall explain at large in its place, treating of *ſtatice*.

We have in this plant an inſtance alſo of Linnæus's error in ſeparating the naturally-allied genera of the preſent claſs, the *valerian* and *valerianella* being placed among the *trigynia*, and this and the *ſtatice* among the *pentagynia*. But this is little to what we ſhall have occaſion to obſerve in the ſucceeding genera.

DIVISION I. BRITISH SPECIES.

1. Common Sea-Lavender.

Limonium vulgare.

The root is long, thick, divided, and ſpreading.

The leaves riſe in a large tuft: they are oblong, and conſiderably broad: they have ſhort footſtalks, and are of a deep, duſky, bluiſh green.

The ſtalk is round, firm, upright, and divided into many branches: it is of a pale green, and has no leaves.

The flowers ſtand at the tops of the branches in ſeveral long ſeries, principally on one ſide; and they are ſmall and purple.

The ſeed is ſingle, ſmall, roundiſh, and brown.

It is common in ſalt marſhes, and about our coaſts. It flowers in June.

C. Bauhine calls it *Limonium maritimum majus*. Others, *Limonium vulgare*.

The roots of this plant are powerfully aſtringent: they may be given in decoction, or in powder; and they ſtop looſeneſſes.

The ſeeds are good in the diabetes.

2. Dwarf Sea-Lavender.

Limonium foliis ſeſſilibus parvum.

The root is long, ſlender, of a rediſh colour, and furniſhed with ſeveral fibres.

The leaves riſe in a cluſter; and are ſmall, and of a pale bluiſh green: they are oblong, narrow, and ſharp-pointed; and they have no footſtalks, but riſe from the root immediately by a narrow baſe.

The ſtalks are numerous, ſlender, and divided into ſeveral branches: they are uſually naked, as in the other; but ſometimes there grows a leaf or two near their baſe, reſembling thoſe from the root.

The flowers are ſmall, and of a very pale fleſhy purple: they ſtand in many long ſeries on the tops of the branches.

It is common on our ſalt marſhes, and flowers in May.

Some have confounded it with the former as a variety; but its leaves ſpeak it a perfectly diſtinct ſpecies.

Ray calls it *Limonium minus*. Others, *Limonium parvum*.

3. Sea-Lavender, with umbellated flowers.

Limonium floribus umbellatis.

The root is long, thick, of a duſky brown, and furniſhed with many fibres.

The leaves riſe in a large tuft; and they are long, narrow, ſharp-pointed, of a deep green, and placed on ſhort, red footſtalks.

The ſtalks are numerous, tall, thick, and divided toward the top into numerous branches: the height of the plant is a foot and half, and its tops ſpread two feet in breadth.

The flowers are ſmall and purple: they ſtand at diſtances from one another, and form a kind of umbel.

It is common about our ſouthern coaſts, and flowers in July.

Ray calls it *Limonium Anglicum minus caulibus ramoſioribus, floribus in ſpicis rarius ſitis. Minus* is an ill term, for it often grows very large.

DIVISION II. FOREIGN SPECIES.

Fine-leaved Sea-Lavender.
Limonium foliis tenuiſſimis.

The root is long, ſlender, and furniſhed with a few fibres.

The firſt leaves riſe in a thick tuft; and they are long, very ſlender, and graſſy: ſometimes they are divided, but uſually quite ſimple.

The ſtalk is round, upright, and of a pale green: it divides toward the top into a vaſt number of branches.

The leaves on this are very ſmall, oblong, and compoſed of a very few ſlender ſegments.

The flowers ſtand at the tops of the ſtalks in ſhort cluſters, and are of a pale red.

The ſeeds are ſmall, ſingle, and naked.

It is a native of the coaſt of Africa, and flowers in June.

Plukenet calls it *Limonium minimum comatum elegans.*

GENUS IV.

BASTARD TOADFLAX.

THESIUM.

THE flower has no petals. The cup is formed of a ſingle piece, lightly divided into five obtuſe ſegments; which ſtand upright, and are coloured on the inner ſide: ſome have called them, but erroneouſly, *petals.* The ſeed is ſingle, roundiſh, and naked: it remains in the boſom of the cup.

Linnæus places this among the *pentandria monogynia*; the threads in the flower being five, and the ſtyle ſingle.

He takes away its old name *linaria adulterina*, and calls it *theſium.* The other muſt be acknowledged a very ill conſtructed generical term.

DIVISION I. BRITISH SPECIES.

Common Baſtard Toadflax.
Theſium vulgare.

The root is long, thick, divided, and furniſhed with numerous fibres.

The firſt leaves riſe in a tuft; and are oblong, narrow, ſharp-pointed, and undivided at the edges: their colour is a pale green, and they have no footſtalks.

The ſtalks are roundiſh, upright, brown, and a foot high: they are not much branched, and they generally grow many together.

The leaves are numerous, and placed irregularly: they are long, narrow, and ſharp-pointed: they have no footſtalks; they are undivided at the edges, and of a pale green.

The flowers ſtand in great number at the tops of the ſtalks in a kind of ſpikes; and they look white, the inſide of the cup being of that colour.

The ſeed is ſingle and large.

It is common on ſome hilly grounds, and flowers in June.

C. Bauhine calls it *Linaria montana floſculis albicantibus.* Others, *Alſine linariæ folio*, and *Linophyllon.*

We have an inſtance in this plant how very careleſsly the old writers impoſed names. There is no reſemblance of *linaria* in the flower of this plant. The leaves and manner of growing were the occaſion of the title.

Its virtues are unknown.

DIVISION II. FOREIGN SPECIES.

1. Yellow-flowered Baſtard Toadflax.
Theſium flore flavo.

The root is long, thick, brown, and furniſhed with many fibres.

The ſtalk is round, upright, ſlender, and ten inches high.

The leaves ſtand alternately; and they are oblong and broad, of a pale green, undivided at the edges, and obtuſe at the end.

The flowers ſtand at the tops of the branches in ſmall cluſters about five together: they are little, and of a gold yellow.

The ſeed is ſingle, round, and naked.

It is common in the paſtures of Virginia and Penſylvania, and flowers in July.

Plukenet calls it *Centaurium luteum aſcryoides Virginianum.* Linnæus, *Theſium floribus umbellatis foliis oblongis.*

GENUS V.

AGRIMONY.

AGRIMONIA.

THE flower is compoſed of five ſmall petals: they are broad, and nipped at the top; and they have narrow baſes, by which they adhere to the cup. The cup is double; the inner one is ſmall, and ſtands upon the rudiment of the fruit: this is divided ſlightly into five ſegments, and it is hid as it were by the other or outer, which is larger. The ſeed is ſingle, naked, rough, and has a double kernel.

Linnæus places this among the *dodecandria digynia*; the threads being twelve in each flower, and the ſtyles from the rudiment of the fruit two.

DIVI-

Great Smooth water Valerian

Wild Valerian

Small Wild Valerian

Garden Valerian

Red Valerian

Narrow Leavd Small Valerian

Celtick Spikenard

Common Lambs Lettuce

Common Sea Lavender

Dwarf Sea Lavender

Fine Leavd Lavendor

Common Bastard Toad flax

Yellow Flowerd Bastard Toadflax

Common Agrimony

Small flowerd Agrimony

Common Thrift

Common Burnet

Great Burnet

DIVISION I. BRITISH SPECIES.

Common Agrimony.
Agrimonia vulgaris.

The root is formed of ſeveral thick, tough fibres.

The firſt leaves are numerous, large, and pinnated: they have ſhort, rediſh footſtalks; and each is compoſed of about four pair of pinnæ, with an odd one at the end: their colour is a beautiful freſh green on the upper ſide, and greyiſh underneath.

The ſtalk is round, firm, upright, and two feet high: it is thick, hairy, not at all branched, and of a rediſh colour.

The flowers are ſmall, and of a gold yellow: they are placed in a long, ſlender ſpike at the top of the ſtalk.

The ſeeds are large and rough, with a kind of hooked hairs.

It is common in our paſtures, and flowers in July.

C. Bauhine calls it *Eupatorium veterum, ſive Agrimonia.* Others, *Agrimonia*, and *Agrimonia vulgaris.*

It is a diuretick and deobſtruent, greatly recommended by the antients, but very much neglected in the preſent practice. It opens obſtructions of the viſcera, and is good in the jaundice. It alſo gently and ſafely promotes the menſes.

The freſh leaves make a tea not unpleaſant; and, taken conſtantly in this method, the effect will be very happy in regularly bringing on that diſcharge. A ſyrup of the root is alſo recommended againſt catarrhs.

DIVISION II. FOREIGN SPECIES.

Small-flowered Agrimony.
Agrimonia floribus parvis.

The root is long, thick, and furniſhed with many fibres.

The firſt leaves riſe in a ſmall tuft; and are oblong, and irregularly pinnated: each is compoſed of four or five pairs of ſmall pinnæ, of an uncertain ſize, arranged in pairs along a middle rib; at the extremity of which there ſtand three larger and more regular ſegments: they are of a deep green on the upper ſide, and grey underneath.

The ſtalk is round, upright, hairy, rediſh, and a foot and half high.

The leaves on the lower part of this reſemble thoſe from the root; but thoſe toward the top are compoſed only of three ſegments, ſuch as terminate the three others.

The flowers are ſmall and yellow.

The ſeeds are large, naked, and ſmooth.

It is common among trees in Italy, and flowers in Auguſt.

C. Bauhine calls it *Agrimoniæ ſimilis.* Others, *Agriminioides.*

GENUS VI.

THRIFT.

STATICE.

THE flower is formed of five petals, narrow at the baſe, broader toward the top, and joined at the ſides ſo as to form a kind of bell. There are two cups, one proper and particular to each flower, the other general or common to the whole tuft. The proper cup is formed of a ſingle leaf; and is of a hollow ſhape, narrow at the baſe, and wide at the rim, where it is folded or wrinkled, but not cut into ſegments. The general cup is triple, and it collects the whole tuft of flowers into a kind of round head. The ſeed is ſingle and ſmall, roundiſh, and placed naked in the proper cup of each flower.

Linnæus places this among the *pentandria pentagynia*; the threads in the flower being five, and the ſtyles of the ſame number.

Common Thrift.
Statice vulgaris.

The root is long, thick, and furniſhed with a few fibres: toward the top it uſually divides into two or three heads; and from each of theſe riſes a large cluſter of leaves.

The leaves are long, narrow, and graſſy: their colour is a bluiſh green; and they are ſmooth, undivided at the edges, and ſharp-pointed.

The ſtalk riſes in the centre of a tuft of theſe leaves; and it is round, upright, ſimple, naked, and of a pale greyiſh green.

The flowers ſtand at the top, a great number together, in a round cluſter: they are moderately large, and of a pale fleſhy purple.

The ſeed is ſmall, round, and of a deep brown.

It is common about our ſea-coaſts, and flowers in June.

Its regular growth, and the beauty of its flowers, have introduced it into gardens, where it ſerves inſtead of box for the edgings of borders.

C. Bauhine calls it *Caryophyllus montanus minor.* Lobel, *Caryophyllus marinus minimus.* Others, *Statice montana.*

The addition of *montana* is not abſurd, for in many parts of Europe it is frequent on hills far from the ſea. Culture makes variations in this plant; but there is no other known ſpecies diſtinct from this.

The root is ſaid to be aſtringent; but it is not uſed.

GENUS VII.

BURNET.

SANGUISORBA.

THE flower is compoſed of a ſingle petal, deeply divided into four ſegments: theſe are broad, and obtuſe at the end, narrow at the baſe, and united only at their very bottoms; ſo that the flower, to an incurious obſerver, would ſeem to have four petals. The cup is compoſed of two ſmall leaves: theſe are ſhort and broad: they ſtand oppoſite to one another, and they fall with the flower. The ſeed is ſingle, naked, and roundiſh, and has a double kernel.

Linnæus places this among the *tetrandria monogynia*; the threads in the flower being four, and the ſtyle from the rudiment of the fruit being ſingle.

1. Common Burnet.

Sanguiſorba vulgaris.

The root is long, thick, and furniſhed with many fibres.

The firſt leaves are long, and very beautifully pinnated: each is compoſed of ſix or more pairs of pinnæ, with an odd one at the end; and theſe are ſhort, broad, ſerrated, and ſharp-pointed. Their colour is a beautiful green.

The ſtalk is ſlender, upright, and toward the top it is divided into ſeveral branches: the leaves on it are like thoſe from the root, each compoſed of ſeveral pairs of dentated pinnæ, with an odd one at the end.

The flowers are placed in ſmall oblong heads at the tops of the branches: theſe heads are brown, but the flowers themſelves are of a faint purple.

The ſeeds are ſmall and cornered.

It is common by road-ſides, and in hilly paſtures. It flowers in June.

C. Bauhine calls it *Sanguiſorba minor*. Others, *Pimpinella vulgaris*, and *Pimpinella ſanguiſorba minor*.

2. Great Burnet.

Sanguiſorba major.

The root is compoſed of numerous thick fibres.

The firſt leaves are large and pinnated: each is compoſed of three or four pairs of pinnæ, with an odd one at the end; and theſe are oblong, moderately broad, and ſharp-pointed, ſerrated at the edges, and of a deep green.

The ſtalk is upright, ſlender, branched, and two feet high.

The leaves on this reſemble thoſe from the root; but they are ſmaller.

The flowers ſtand at the tops of the branches in ſhort oblong heads: they are of a very faint and dull purpliſh colour; and the heads are brown between them.

The ſeeds are ſmall and cornered.

It is common in paſtures, and flowers in July.

C. Bauhine calls it *Sanguiſorba major*.

Theſe two ſpecies have the ſame general qualities; but the firſt poſſeſſes them in the greater degree. It is a cordial and ſudorifick: it was much uſed formerly to give a flavour to wine; but it is now neglected.

It is an aſtringent of conſiderable power. The root dried and powdered ſtops purgings; or it may be given in form of a ſtrong decoction to the ſame purpoſe. The juice of the leaves is good againſt hæmorrhages.

GENUS VIII.

MEADOW-RUE.

THALICTRUM.

THE flower is compoſed of four petals: they are roundiſh, and hollowed, and are of ſhort duration. There is no cup. The ſeed is ſingle after every flower, and it is ſurrounded by a rough wrinkled ſkin. The leaves are divided into many parts, and the flowers grow in cluſters.

Linnæus places this among the *polyandria polygynia*; the threads in the flower being numerous, and growing to the receptacle; and the ſtyles from the rudiment of the ſeed alſo numerous.

DIVISION I. BRITISH SPECIES.

1. Common Meadow-Rue.

Thalictrum vulgare.

The root is compoſed of innumerable long, thick, and ſpreading fibres.

The ſtalk is firm, upright, ſtriated, purpliſh toward the bottom, and three feet high.

The leaves are large, and very beautifully divided or compoſed of numerous ſmall parts, placed on ſeparate ſhort footſtalks, on a large divided rib: theſe are notched at the edges, eſpecially toward the points; and are of a bluiſh green, but deep and duſky.

The flowers are ſmall and whitiſh: they ſtand in great cluſters on the ſtalks.

The ſeeds are brown.

It is common in meadows, and flowers in July.

C. Bauhine

C. Bauhine calls it *Thalictrum majus ſiliqua anguloſa ſtriata.* Others, *Thalictrum vulgare*, and *Thalictrum majus*, or *Thalictrum caule nigricante.*

2. Small Meadow-Rue.

Thalictrum minus.

The root is long, ſlender, and creeping.

The ſtalk is round, of a pale brown, upright, ſcarce at all branched, and about eight inches high.

The leaves ſtand irregularly on it; and they are very beautiful: they are in the whole conſiderably large; but they are compoſed of many ſmall parts, placed on a divided rib; and theſe are ſhort, broad, and dented at the end. The whole tuft is of a tender ſubſtance, and deep purpliſh green colour.

The flowers ſtand at the tops of the ſtalk in a kind of umbel: they are ſmall, and of a pale yellow.

The ſeeds are large, and their creſt is wrinkled and brown.

It is found on hilly paſtures in many parts of the kingdom, and flowers in July.

C. Bauhine calls it *Thalictrum minus*; a name copied by others.

3. Little broad-leaved Meadow-Rue.

Thalictrum minus foliis latioribus.

The root is compoſed of tough, ſlender fibres.

The ſtalk is round, upright, a foot high, branched, and of a purpliſh colour, eſpecially toward the root.

The leaves are large, and of a duſky green: they are compoſed of many parts, as in the former ſpecies; but theſe are broader and larger than in any other, of a deep green, and nipped at the top.

The flowers grow in a broad tuſt at the top of the ſtalk; and are ſmall and whitiſh, with a very faint tinge of yellow.

The ſeeds are ſmall.

It is common on the Welch mountains, and flowers in May.

Ray calls it *Thalictrum minus montanum foliis latioribus.*

4. Meadow-Rue with ſhining leaves.

Thalictrum foliis ſplendentibus.

The root is ſmall, and creeps under the ſurface.

The ſtalk is ſtriated, weak, and not much branched: it is about a foot high, but rarely ſtands quite erect.

The leaves are large; and each is compoſed of numerous, broad ſegments, placed on ſhort footſtalks: theſe are nipped at the tops and ſides. The whole leaf is of a deep blackiſh green on the upper ſide, and of a greyiſh green underneath.

The flowers ſtand at the tops of the ſtalks in rounded ſcattered tufts: they are white and ſmall.

The ſeeds are ſmall; and their coat is rough and purpliſh.

It is a native of our northern counties, and thrives beſt on damp ground upon hills. It flowers in April, and dies to the ground ſoon after.

Ray calls it *Thalictrum minimum montanum rubens foliis ſplendentibus.*

DIVISION II. FOREIGN SPECIES.

Narrow-leaved Meadow-Rue.

Thalictrum anguſtifolium.

The root is compoſed of numerous tough, yellow threads.

The ſtalk is round, ſlender, purpliſh, upright, not at all branched, and a foot high.

The leaves are large, and of a freſh green: they are divided into numerous ſlender parts, and theſe are undivided at the edges, and ſharp-pointed.

The flowers ſtand at the tops of the ſtalks in ſpiked cluſters; and they are ſmall and white, with a faint tinge of purple.

The ſeeds have a rough, brown coat.

It is found in the woods of Germany near ſprings. It flowers in July.

C. Bauhine calls it *Thalictrum pratenſe anguſtiſſimo folio.* Others, *Thalictrum foliis gramineis.*

Theſe plants are not diſtinguiſhed by any particular virtues by authors; but they deſerve ſome notice. The country-people in Buckinghamſhire boil the roots and young leaves of the common kind in ale, and take this as a purge. In a ſmall doſe it works by urine, and is good againſt obſtructions of the viſcera.

GENUS IX.

FUMITORY.

FUMARIA.

THE flower is formed in the manner of the papilionaceous kind, but terminates behind in a ſpur. The cup is compoſed of two leaves, ſmall, and placed oppoſite. The ſeed is naturally ſingle, and incloſed in a looſe ſkin. The leaves are divided, and the flowers are ſmall.

Linnæus places this among the *diadelphia hexandria*; the buttons on the threads in the flower being ſix, and arranged in two aſſortments.

There is no genus in which Nature wantons ſo much. This Linnæus is obliged to acknowledge, who has placed it among his *diadelphia*; and it is as needful to be mentioned here, where, after the method of Mr. Ray, it is placed with the *thalictrum*, among the ſingle-ſeeded plants.

The ſeed, which is naturally ſingle, and has its outer ſkin looſe, in ſome ſpecies, has that membrane ſwelled into a kind of capſule; and in ſome others there is no cup to the flower. The analogy of parts in general ſhew theſe however to be true ſpecies of *fumitory*; and all authors have perceived it: therefore it is proper to keep them under the ſame generical name.

DIVISION I. BRITISH SPECIES.

1. Common Fumitory.

Fumaria vulgaris.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalk is weak, of a pale green, ſcarce upright, divided into many branches, and a foot high.

The leaves are large, and of a faint green: they are divided into innumerable ſmall parts, placed on a branched rib; and they are of a ſlender ſubſtance.

The flowers ſtand in ſpikes at the tops of the ſtalks and branches; and they are of a mixed red, partly fleſh colour, and partly purple.

The ſeed is large and brown.

It is common in our corn-fields, and in all other cultivated ground. It flowers in June.

C. Bauhine calls it *Fumaria officinarum et Dioſcoridis.* Others, *Fumaria vulgaris.*

2. Great Ramping Fumitory.

Fumaria major.

The root is long, thick, white, and furniſhed with a few ſtraggling fibres of the ſame colour.

The ſtalks are weak, and of a pale green, branched; and, when they can ſupport themſelves among buſhes, two feet high.

The leaves are large, and of a whitiſh green: they are divided into numerous parts, or compoſed of many ſegments, as in the other; but theſe are broader.

The flowers ſtand in long, looſe ſpikes at the tops of the ſtalks, and on footſtalks riſing from the boſoms of the leaves: they are large, and of a pale red.

The ſeeds are ſmall and brown.

It is common in hedges at the ſides of plowed lands, and flowers in Auguſt.

Ray calls it *Fumaria major ſcandens flore pallidiore.*

3. Broad-leaved climbing Fumitory.

Fumaria latifolia claviculata.

This is a ſpecies ſo extremely different from the other in its form, that Mr. Ray has placed it in another claſs; but it is properly and truly a kind of *fumitory.*

The root is ſmall, divided into ſeveral parts, and furniſhed with numerous fibres.

The ſtalk is round, weak, of a pale green, and very much branched: it is a foot high, but very weak, and unable to ſupport itſelf upright, except by climbing; for which purpoſe Nature has given it many tendrils at the ends of the branches.

The leaves are broad and ſharp-pointed: they grow in ſmall cluſters, and their colour is a bluiſh green.

The flowers ſtand three or four together in little heads on footſtalks riſing from the boſoms of the leaves: they are ſmall and white, with a faint tinge of purple.

The ſeeds are ſmall and brown.

It is common under hedges in our northern counties, but it is more ſcarce elſewhere. It flowers in Auguſt.

C. Bauhine calls it *Fumaria claviculis donata.* Others, *Fumaria alba latifolia claviculata.*

The *common fumitory* is good againſt ſcorbutick diſorders. The juice may be taken in doſes of four ſpoonfuls; and it will operate gently by ſtool at firſt, but only as a deobſtruent and ſweetener of the blood afterwards. Some ſmoak the dried leaves in the manner of tobacco for diſorders of the head, with ſucceſs.

DIVISION II. FOREIGN SPECIES.

Hollow-rooted Fumitory.

Fumaria radice cava.

The root is large, roundiſh, and hollow; and it is furniſhed with abundance of fibres.

The ſtalk is weak, of a whitiſh green, and about a foot high, but indifferently erect, and divided into many branches.

The leaves are large, and compoſed of numerous oblong indented ſegments: they are ſupported on ſeparate footſtalks; and they are of a pale bluiſh green.

The flowers ſtand at the tops of the ſtalks in ſpikes, and they are of a pale red.

It is a native of the warmer parts of Europe, and flowers in May.

C. Bauhine calls it *Fumaria bulboſa.* Others, *Fumaria radice cava*, and *Radix cava major flore purpureo.*

Its virtues are the ſame with thoſe of the *common fumitory*; and, where it grows wild, it is uſed to the ſame purpoſe.

The END of the TWENTIETH CLASS.

THE

THE BRITISH HERBAL.

CLASS XXI.

Plants which have labiated flowers, with four ſeeds following each, and placed naked in the cup; and whoſe leaves ſtand in pairs upon the ſtalks.

THIS is a claſs as obviouſly diſtinguiſhed by Nature, and as perfectly ſeparated from all others, as any the whole ſeries of plants affords; and the generality of authors have paid ſo much regard to theſe her obvious characters, as to keep them together. They make the verticillate plants of Mr. Ray and others.

They could not but be kept together by all who formed their ſyſtems on the great and plain marks impreſſed on plants; becauſe they ſo perfectly, and in ſo many characters, reſemble one another, that they are plainly a ſingle family; to which no plant can be added, and from which none can be ſeparated without violence to the moſt eſſential diſtinctions: but the modern methods pay very little regard to Nature.

Linnæus ſeparates *betony* and *vervain* by twelve claſſes: not becauſe one has, and the other has not labiated flowers, leaves in pairs, and four naked ſeeds; for in theſe moſt eſſential characters they agree: but becauſe *betony* has four threads in the flower, two of which are longer, and two ſhorter, it is placed among the *didynamia*; and becauſe *vervain* has only two, it ſtands among the *diandria*, ſeparated from the reſt of the labiated naked-ſeeded kind, and joined with *ſpeedwell* and *enchanters nightſhade*.

This may ſtand as an inſtance of the impropriety of modern ſyſtems. The reader will pardon me the unwilling taſk of producing more on this occaſion, ſince he will diſcern them in the characters of the genera.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this country.

GENUS I.

MOTHER OF THYME.

SERPYLLUM.

THE flower is of the labiated kind, formed of a ſingle petal, and gaping at the mouth. The upper lip is obtuſe and ſmall: the lower lip is longer, and divided into three ſegments; the middle one of which is larger than the others. The cup is divided into two lips; and the ſeeds are naked, ſmall, and round.

Linnæus places this among the *didynamia gymnoſpermia*; the threads in the flower being two longer and two ſhorter, and the ſeeds having no covering. He includes in the ſame genus ſeveral plants not properly belonging to it; and, inſtead of *ſerpyllum*, calls it *thymus*. This is a matter of indifference, for either name will do for both *thyme* and *mother of thyme*: but as we have moſt of the *ſerpyllums*, I have taken that.

DIVISION I. BRITISH SPECIES.

1. Common Mother of Thyme.

Serpyllum vulgare.

The root is ſmall, fibrous, and hard.

The ſtalks are numerous, weak, and trailing: they are of a purpliſh colour toward the bottom, green at the top, and branched: they are ſix or eight inches long; and as they ſpread every way from the root, they naturally form a large tuft.

The leaves are ſmall, and placed in pairs without footſtalks: they are of an oval figure, but pointed; and their colour is a dee› green.

The flowers ſtand in ſmall tufts at the tops of all the ſtalks and branches; and they are moderately large, and of a beautiful purple.

The ſeeds are ſmall, blackiſh, and round.

It is common on heaths in dry paſtures, and by road-ſides. It flowers in July.

C. Bauhine calls it *Serpyllum vulgare minus.* Others, *Serpyllum vulgare.* Our people, *Mother of thyme*, and *Wild thyme.*

It is excellent againſt nervous diſorders. An infuſion of it made, and drank in the manner of tea, is pleaſant; and is an excellent remedy for head-achs and giddineſs, and other diſorders of that kind. It certainly cures that troubleſome diſeaſe the nightmare. A gentleman afflicted terribly with that complaint took a ſtrong infuſion of this by way of remedy, and was free many years. Afterwards the diſorder returned, but always gave way to the ſame remedy.

The flowers of the *common mother of thyme* are ſometimes larger, and ſometimes ſmaller. Hence ſome authors have divided the plant into two ſpecies; but I have often ſeen both in the ſame ſpot of ground, where they have plainly riſen from the ſame ſeed.

2. Broad-leaved Mother of Thyme.

Serpyllum foliis latioribus.

The root is long, ſlender, and hard, and has many very ſmall fibres.

The ſtalks are numerous, tolerably upright, of a woody hardneſs, and of a brown colour.

The leaves ſtand in pairs; and they are oblong and broad, obtuſe at the ends, and of a deep duſky green.

The flowers ſtand in longiſh tufts at the tops of the ſtalks; and are large, and of a faint red, often white.

Four ſeeds follow each; and they are roundiſh, very ſmall, of a deep brown, and gloſſy.

The plant is larger, and grows more erect than the *common mother of thyme.*

C. Bauhine calls it *Serpyllum vulgare majus.* Others, *Serpyllum latifolium.*

It is common in our ſouthern counties, and flowers in June.

3. Lemon Thyme.

Serpyllum folio longiore citratum.

The root is long, thick, divided, and furniſhed with many fibres.

The ſtalks are numerous, round, firm, branched, of a pale green, and five or ſix inches long, partly procumbent, and partly raiſed upright.

The leaves are oblong and broad, ſharp-pointed, and of a pale green.

The flowers ſtand at the tops of the ſtalks and branches; and they are of a pale red.

The ſeeds are ſmall, and brown.

The whole plant has a very agreeable ſmell, an aromatick with a citron, or lemon-flavour.

We have it wild in our ſouthern counties, and it is cultivated in our gardens; but there is no difference except in ſize. It flowers in June.

C. Bauhine calls it *Serpyllum foliis citri odore.* Others, *Serpyllum citratum*, and *Thymus citrei odore.*

4. Narrow-leaved ſmooth Mother of Thyme.

Serpyllum anguſtifolium glabrum.

The root is long and ſlender, and has a few fibres.

The ſtalks are weak, trailing, brown, branched, and eight inches long.

The leaves are longiſh, narrow, ſmooth, and of a deep green.

The flowers are numerous, and of a faint red.

The ſeeds are larger than in moſt of the preceding kinds, and of a purpliſh brown.

It is found on heaths in Kent and Suſſex, and flowers in June.

C. Bauhine calls it *Serpyllum anguſtifolium glabrum.*

5. Hairy Mother of Thyme.

Serpyllum hirſutum folio oblongo obtuſiore.

The root is long, ſlender, and brown.

The ſtalks are very numerous, weak, and trailing: they are of a purpliſh colour, and very much branched.

The leaves are oblong, tolerably broad, and obtuſe: they are of a pale green, and hairy.

The flowers are ſmall: they ſtand at the tops of the ſtalks in little hairy heads; and are naturally of a faint red, but often white.

The ſeeds are ſmall and blackiſh.

We have it on the heaths in Surry. It flowers in July.

Ray calls it *Serpyllum vulgare hirſutum.*

6. Broad-leaved great Mother of Thyme.

Serpyllum latifolium fruticoſius.

The root is large and ſpreading.

The ſtalks are thick, round, upright, very much branched, and ſix or eight inches high: they ſpread themſelves out into tufts, which have a ſhrubby aſpect.

The leaves are broad and ſhort, of a deep green, and hairy.

The flowers are large, and of a faint purple; and the ſeeds are very minute, roundiſh, and black.

We have it on the Welch mountains. It flowers in Auguſt.

C. Bauhine calls it *Serpyllum latifolium hirſutum.*

7. Creeping

7. Creeping ſcentleſs Mother of Thyme.

Serpyllum repens inodorum.

The root is ſmall and thready.

The ſhoots that grow firſt from it lie upon the ground, and take root in different places.

The ſtalks which riſe from theſe are weak, ſlender, purple, and often branched.

The leaves are oblong, narrow, hairy, and of a duſky green: they have nothing of that ſpicy ſmell ſo prevalent in the others.

The flowers are ſmall, and of a faint purple: they ſtand in cluſters at the tops of the ſtalks.

The ſeeds are ſmall and blackiſh.

It is a native of Ireland, and flowers in June.

Ray calls it *Serpyllum hirſutum repens minus inodorum.*

DIVISION II. FOREIGN SPECIES.

Garden-Thyme.

Thymum vulgare.

The root is compoſed of innumerable fibres.

The ſtalks are numerous, hard, woody, brown, very much branched, and ten inches high.

The leaves are ſhort, broad, pointed, and of a duſky green.

The flowers are ſmall, very numerous, and of a pale red.

The ſeeds are little, roundiſh, brown, and gloſſy.

It is a native of Italy; but we have it for the ſervice of the kitchen in every garden. It flowers in June.

C. Bauhine calls it *Thymum vulgare.* Others, *Thymum durius.*

It is a good aromatick, ſtrengthens the ſtomach, diſperſes flatulences, and does ſervice in nervous complaints. The beſt way of taking it is in infuſion. If it were not ſo common at our tables, it would be more regarded as a medicine.

GENUS II.

MINT.

MENTHA.

THE flower is compoſed of a ſingle petal, tubular at the bottom, and divided at the edge into four parts; the upper ſegment of which is broader than the others, and nipped at the end. The cup is formed of a ſingle piece, divided into five ſlight ſegments at the edge, and it remains as a covering for the ſeeds; which are four in number, and ſmall.

Linnæus places this among the *didynamia gymnoſpermia*; two of the four threads in the flower being longer than the others, and the ſeeds ſtanding in the cup naked. This author joins very improperly under the ſame name *pennyroyal*; a plant of a genus perfectly diſtinct.

DIVISION I. BRITISH SPECIES.

1. Hairy verticillate Water-Mint.

Mentha aquatica hirſuta verticillata.

The root is ſmall, ſlender, and creeping.

The ſtalks are numerous and branched: they are a foot long, but not very upright; and they are ſquare, of a pale green, and lightly hairy.

The leaves have ſhort, hairy footſtalks: they are oblong, moderately broad, and dented at the edges. Their colour is a faint green.

The flowers ſtand at the joints in cluſters, ſurrounding the ſtalk; they are ſmall, and of a pale red.

The ſeeds are minute and brown.

It is common about waters, and often gets into corn-fields. It flowers in April, and continues to Auguſt.

C. Bauhine calls it *Calamintha arvenſis verticillata.* Others, *Mentha arvenſis verticillata hirſuta.*

2. Smooth verticillate Water-Mint.

Mentha aquatica verticillata glabra.

The root is fibrous.

The ſtalks lie upon the ground: they are ſquare, weak, ſmooth, purpliſh, and ſix or eight inches long, but rarely branched.

The leaves have ſhort footſtalks: they are ſmall, oblong, ſmooth, dented at the edges, and ſharp-pointed. Their natural colour is a duſky green; but they are often red.

The flowers are ſmall, and of a faint purple: they grow at the joints in cluſters, ſurrounding the ſtalk.

It is found in our midland counties by the ſides of brooks, and flowers in Auguſt.

Lobel calls it *Calamintha aquatica Belgarum et Matthioli.* Others, *Mentha aquatica exigua verticillata.*

3. Round-leaved aromatick Mint.

Mentha aromatica folio rotundiore.

The root is compoſed of numerous, long, and ſlender fibres.

The ſtalks are weak, ſquare, partly procumbent, and partly upright; of a purpliſh colour, and a foot or more in height.

The leaves have very ſhort footſtalks: they are broad, ſhort, roundiſh, ſharp-pointed, and ſharply ſerrated about the edges.

The flowers furround the ſtalks at the joints in little cluſters: they are moderately large, and of a deep purple.

The whole plant has a very fragrant ſmell.

It is common in the iſle of Ely. It flowers in July.

Ray calls it *Mentha arvenſis verticillata folio rotundiore odore aromatico.*

4. Curled Mint.

Mentha criſpa verticillata.

The root creeps under the ſurface, and ſpreads abundantly.

The ſtalks are numerous, ſquare, and of a purpliſh colour: they are a foot and half in length; but they lie in a great meaſure upon the ground; and they are not much branched, but have many ſhoots from the boſoms of the leaves.

The leaves are oblong, broad, and of a pale green: they are not at all hairy; but they are often wrinkled, and ſometimes curled at the edges.

The flowers furround the ſtalks at the joints; and they are ſmall and purple.

It is common wild about waters; and at one time was frequent in gardens, but the *ſpear-mint* has there taken its place. It flowers in July.

C. Bauhine calls it *Mentha criſpa verticillata.* Others, from the common redneſs of its ſtalk, *Mentha ſativa rubra.*

5. Common red Mint.

Mentha rubra vulgaris.

The root is long, ſlender, and creeping.

The ſtalk is firm, upright, ſquare, and two feet high.

The leaves are oblong, narrow, ſerrated at the edges, and ſharp-pointed: they have ſhort footſtalks; and they are of a pale green, but they often grow red.

The flowers ſtand in ſmall circular tufts round the ſtalks at the places where the upper leaves grow; and they are of a pale red.

This is one of thoſe *mints* we have wild in our watery places, and uſed to cultivate; but the *ſpear-mint* has rendered it neglected.

C. Bauhine calls it *Mentha hortenſis verticillata ocymi odore.* Others, *Mentha cardiaca*, and *Mentha fuſca.*

6. Water Mint.

Mentha aquatica folio brevi lato.

The root is compoſed of a multitude of ſlender fibres, which penetrate deep, and ſpread every way.

The ſtalk is ſquare, upright, not much branched, but full of young ſhoots from the leaves; and it is two feet or more in height, very upright, and of a robuſt aſpect.

The leaves are broad and ſhort: they have moderately long footſtalks; and they are largeſt at the baſe, ſharp-pointed, and ſharply ſerrated at the edges. Their colour is naturally a deep pleaſant green; but they frequently grow reddiſh.

The flowers are moderately large, and of a pale red: they are placed in large, round heads upon the tops of the ſtalks.

It is common about waters, and flowers in June.

The whole plant has a ſtrong ſmell, and an acrid taſte, in ſome degree approaching to that of *pepper-mint.*

C. Bauhine calls it *Mentha rotundifolia paluſtris ſeu aquatica major.* Others, *Mentha aquatica*, and *ſiſymbrium.*

7. Hairy Water-Mint.

Mentha aquatica folio brevi hirſuto.

The root is compoſed of fibres, and ſends out creeping ſhoots every way to a great diſtance.

The ſtalk is ſquare, upright, hairy, of a browniſh or rediſh colour, and about a foot and half high.

The leaves are broad, ſhort, and roundiſh; but they have a long, ſharp point.

The flowers are ſmall, and of a very pale purple; and they are placed in thick, roundiſh cluſters at the tops of the ſtalks and branches.

It is all over covered with a ſhort, light hairyneſs, of a greyiſh colour.

We have it common about ſtanding waters, and it flowers in July.

J. Bauhine calls it *Mentha aquatica ſive ſiſymbrium hirſutius.* Others, *Siſymbrium hirſutum*, and *Siſymbria mentha.*

Its taſte is acrid, but diſagreeable.

8. Small-leaved hairy Water-Mint.

Mentha aquatica hirſuta foliis minoribus.

The root is ſlender and creeping.

The ſtalk is ſquare, firm, upright, rediſh, and a foot and half high.

The leaves have ſhort footſtalks: they are ſmaller than in the preceding ſpecies, of a pale green, and hairy: they are deeply and ſharply ſerrated at the edges, and ſharp-pointed.

The flowers are large, and of a beautiful fleſh-colour: they ſtand in ſmall, round cluſters upon the tops of the branches.

The whole plant has a very fragrant ſmell, ſomewhat reſembling that of a fine Seville orange.

It is common about waters in Cambridgeſhire, and ſome other places. It flowers in Auguſt.

Ray calls it *Mentha ſiſymbrium dicta hirſuta glomerulis ac foliis minoribus & rotundioribus.*

9. Rough-leaved ſpiked Mint.

Mentha ſpicata folio rugoſiore.

The root is ſlender and creeping.

The ſtalk is ſquare, robuſt, upright, of a purpliſh colour, two feet high, and not much branched.

The leaves have ſhort footſtalks: they are long, narrow, ſharp-pointed, and ſharply ſerrated along the edges: their ſurface is rough, and their colour a deep duſky green.

The flowers ſtand at the tops of the ſtalks and branches in long, ſlender ſpikes: they are ſmall, and of a faint purple.

It is not uncommon about waters in Kent, and ſome other counties. It flowers in Auguſt.

Ray calls it *Mentha anguſtifolia ſpicata glabra folio rugoſiore odore graviore.*

10. Broad-



Common Meadow Rue



Small Meadow Rue



Narrow leaved Meadow Rue



Common Fumitory



Broad leaved Climbing Fumitory



Hollow rooted Fumitory



Common mother of Thyme Lemon Thyme



Broad leaved mother of Thyme

Garden Thyme



Hairy verticillate Water Mint



Curled Mint



Water Mint



Broad leaved mother of Thyme



Spikd Horse mint



Pepper mint



Spear mint



Dutch curled mint

Small leaved hairy Water Mint

10. Broad-ſpiked Mint.

Mentha ſpica latiore foliis glabris.

The root is ſmall and creeping.

The ſtalk is firm, ſquare, erect, brown, not much branched, and a foot and half high.

The leaves have ſhort footſtalks: they are oblong, ſmooth, moderately indented, and ſharp-pointed.

The flowers grow at the tops of the ſtalks and branches in long, large, and hairy ſpikes, which are of a flatted figure: they are of a pale fleſh-colour.

It is found in wet places in Eſſex, and flowers in July.

Ray calls it *Mentha ſpicata anguſtifolia glabra ſpica latiore.*

11. Broad-leaved ſpiked Mint.

Mentha latifolia ſpicata.

The root is compoſed of innumerable fibres.

The ſtalk is upright, branched, ſquare, ſmooth, a pale green, but often red toward the bottom, and half a yard high.

The leaves ſtand on ſhort footſtalks: they are oblong, broad, of a freſh and beautiful green, and ſharp-pointed.

The flowers ſtand in long and moderately thick ſpikes, and are of a deep purple.

We have it in Eſſex, and in Surry. It flowers in July.

Ray calls it *Mentha ſpicata glabra latiore folio.*

12. Broad, whitiſh leaved Horſe-Mint, with a thick ſpike.

Mentha foliis cinereis latioribus, ſpica craſſa.

The root is compoſed of numerous thick fibres.

The ſtalk is ſquare, weak, whitiſh, and branched, and is about a foot high.

The leaves are oblong, broad, and of a greyiſh green, ſharp-pointed, and deeply ſerrated.

The flowers are of a deep fleſh-colour: they grow in thick, long ſpikes at the tops of the ſtalks and branches.

It is common by river-ſides in Eſſex, and flowers in July.

C. Bauhine calls it *Mentha paluſtris oblongo folio.* Others, *Menthaſtrum hirſutum*, and *Menthaſtrum minus.*

13. Long-leaved ſpiked Horſe-Mint.

Mentha floribus pallidis folio longo candicante.

The root is long and creeping.

The ſtalk is ſquare, firm, whitiſh, and very upright: it is two feet and a half high, and has numerous ſhoots from the boſoms of the leaves, all which ſoon run up to flower.

The leaves are long, and moderately broad: they have no footſtalks: they are ſharply ſerrated, and pointed; and their colour is a greyiſh green on the upper ſide, and a whitiſh underneath.

The flowers ſtand at the tops of all the branches, and are very numerous: they are diſpoſed in long, ſlender ſpikes, and are of a pale whitiſh colour.

It is found in many parts of Eſſex in great abundance, and is not ſcarce in many other places. It flowers in Auguſt.

J. Bauhine calls it *Menthaſtrum ſpicatum folio longiore candicante.* C. Bauhine, *Mentha ſylveſtris folio longiore.*

The ſmell is ſtrong and diſagreeable.

14. Round-leaved Horſe-Mint.

Mentha folio rugoſo rotundiore.

The root is compoſed of numerous fibres.

The ſtalk is ſquare, upright, and two feet high.

The leaves are of a ſingular form for a plant of this kind, round, large, of a rough ſurface, and of a deep green.

The flowers ſtand in ſpikes at the tops of the ſtalks; and they are of a bright red.

It is found in ſome parts of Eſſex; but is not common. It flowers in July.

C. Bauhine calls it *Mentha ſylveſtris rotundiore folio.* Others, *Menthaſtrum folio rugoſo rotundiore.*

This has a coarſe, ſtrong ſmell, like the preceding, and ſhares the virtues of an antihyſterick with it: they are good alſo in all nervous diſorders.

15. Pepper-Mint.

Mentha piperata.

The root is long, ſlender, and creeping, and ſends out at diſtances cluſters of thick fibres.

The ſtalk is upright, firm, not much branched, and two feet and a half high: it is ſquare, and is uſually of a browniſh red toward the bottom, and green near the top.

The leaves are placed in pairs on ſhort footſtalks: they are large, oblong, ſharp-pointed, and ſerrated at the edges: their colour is a deep green, and they taſte extremely acrid.

The flowers grow at the tops of the ſtalks and branches in thick, ſhort ſpikes: they are of a pale red, and moderately large.

It is found wild in Hertfordſhire, Eſſex, and Surry; and we have it plentifully in gardens.

Ray calls it *Mentha ſpicis brevibus & latioribus foliis menthæ fuſcæ ſapore fervido piperis.*

DIVISION II. FOREIGN SPECIES.

1. Common Spear Mint.

Mentha ſpicata vulgaris.

This plant, though ſo common in our gardens, is not a native of our country.

The root is ſmall and ſpreading.

The ſtalk is ſquare, firm, upright, and two feet or more in height, not much branched, and in colour of a pale green.

The leaves have no footſtalks: they are long, narrow, and ſharp-pointed, ſharply ſerrated at the edges, ſomewhat rough on the ſurface, and of a lively green.

The flowers are numerous, ſmall, and of a bright red: they are placed at the tops of the ſtalks in long, ſlender ſpikes. The taſte is very pleaſant, warm, and aromatick.

It is a native of Germany, but is for the ſervice of the table and of medicine kept in every garden.

C. Bauhine calls it *Mentha Romana*. Others, *Mentha anguſtifolia ſpicata*. Our people, *Spear-mint*, and *Roman mint*.

2. Daniſh curled Mint.

Mentha criſpa Danica.

The root creeps under the ſurface, and has numerous, thick fibres.

The ſtalk is firm, upright, ſquare, of a pale green, not much branched, and two feet high.

The leaves have no footſtalks: they are large, oblong, broad, and very beautiful: they are indented, and curled at the edges; and their colour is a freſh, fine green.

The flowers are large and fleſh-coloured: they ſtand in thick and ſhort ſpikes at the tops of the ſtalks and branches.

It is a native of Denmark; but its beauty has obtained it a place in our gardens. It flowers in Auguſt.

Cluſius calls it *Mentha latifolia criſpa Danica.*

The *mints* in general poſſeſs the ſame qualities: they are ſtomachick and deobſtruent; but there are alſo particular qualities in ſome of the ſpecies. We have mentioned the two *horſe-mints* as eminent in nervous caſes; and the *pepper-mint*, by its warmth, is of great ſervice againſt cholicks.

The *common ſpear-mint* is ſuperior to all the other kinds as a ſtomachick. Its diſtilled water poſſeſſes this quality in a very eminent and uſeful degree. The dried leaves alſo are uſed in powder, and the freſh tops made into tea.

The juice of the tops of *ſpear-mint*, given half a ſpoonful at a time, with a little ſugar, will ſtop vomitings. The diſtilled water is good againſt the ſickneſſes and gripings to which infants are liable. It is alſo excellent at table, not only for its agreeable flavour, but its virtues. Our anceſtors were wiſe who mixed it with beans and peaſe, for it prevents the flatulencies riſing from ſuch foods.

GENUS III.

PENNYROYAL.

PULEGIUM.

THE flower is formed of a ſingle petal, a little longer than the cup; and is divided into two lips; the upper one is broad, and undivided at the tip; the under one is divided into three ſmall ſegments, and there is a ſhort tubular bottom. The cup is formed of a ſingle piece, divided into five ſegments at the rim; and it remains after the flower. The ſeeds are four, and naked, having no covering but the cup. The flowers grow in thick cluſters ſurrounding the ſtalk; and the whole plant has a piercing ſmell.

Linnæus places this among the *didynamia gymnoſpermia*; the threads in the flower being two longer and two ſhorter, and the ſeeds having no capſule, but remaining naked in the cup. But he joins it with mint, denying it to be a ſeparate genus. The diſtinction is indeed minute; but it is certain and unavoidable: and it is uſeful. *Pennyroyal* has always been called by a diſtinct name: it has great virtues, which are recorded of it under its proper and diſtinct title in the antient authors, and which are not thoſe of mint. It is fit therefore that we retain the name, and preſerve the genus as diſtinct; there being foundation for it alſo in the characters of the flower.

DIVISION I. BRITISH SPECIES.

1. Common Pennyroyal.

Pulegium vulgare.

The root is fibrous and creeping.

The ſtalks are numerous, weak, and of a pale green: ſome lie upon the ground, others riſe irregularly up; and they are very much branched: they are ſquare; but the angles are ſo much obliterated in many parts, that they appear round.

The leaves ſtand two at a joint; and they are ſmall, of an oval figure, and of a pleaſant green: they are rounded at the end, and a little indented at the edges.

The flowers are ſmall, and of a pale red; but they grow ſo thick together, that they are conſpicuous upon the plant: they ſurround the ſtalk at the joints, where the leaves grow in great circles.

The ſeeds are inconſiderable and brown.

It is common wild in damp ground, and is brought thence into gardens. It flowers in June.

C. Bauhine calls it *Pulegium latifolium*. Others, *Pulegium vulgare.*

It is a plant of a very great and very well known virtue.

It is excellent againſt obſtructions of the menſes; and may be taken for that purpoſe in the diſtilled water, in form of the juice preſſed freſh from the plant, or in infuſion.

It is alſo uſeful in all obſtructions of the viſcera, and againſt cholicks and ſickneſſes of the ſtomach. A conſerve of the tops of *pennyroyal* acts as a diuretick, and has done great ſervice in the gravel. It is alſo good in jaundice.

Mr. Boyle has left an account of its virtues againſt the chincough: this is worth trying. The method of giving it is in the expreſſed juice, ſweetened with ſugar-candy, a ſpoonful for a doſe.

DIVISION II. FOREIGN SPECIES.

1. Narrow-leaved Pennyroyal.

Pulegium anguſtifolium.

The root is compoſed of numerous fibres, long, ſlender, crooked, and whitiſh.

The ſtalk is firm, upright, not much branched, and a foot high.

The leaves are placed in pairs; but they have uſually tufts of young ones in their boſoms: they are longiſh, narrow, of a pale green, a little indented, and ſharp-pointed.

The flowers grow in cluſters at the joints; and they are ſmall, and of a very faint bluiſh, often white.

The ſeeds are ſmall and blackiſh.

It is a native of the warmer parts of Europe, and flowers in June.

C. Bauhine calls it *Pulegium anguſtifolium.* Others, *Pulegium cervinum, Harts pennyroyal.*

Its virtues are the ſame with the others.

GENUS IV.

WATER HOARHOUND.

LYCOPUS.

THE flower is made of a ſingle petal; which is tubular at the bottom, and divided into four parts at the edge, which form a kind of lips: the upper one conſiſts of a ſingle ſegment, which is broader than the others, and nipped at the end; the other three ſegments form the lower lip; and of theſe the middle one is ſmaller than the reſt. The tubular part of the flower is of the ſame length with the cup; which is alſo formed of a ſingle piece; but it is divided into five ſegments at the rim, which are narrow and ſharp-pointed. The ſeeds are four; and they ſtand naked in the cup.

Linnæus ſeparates this and ſome others from the reſt of the verticillate plants. They ſtand among his *didynamia*; this is one of his *diandria monogynia*; the threads in the flower being only two, and the ſtyle from the rudiment of the fruit ſingle. It is certain, that there are, as this author obſerves, only two threads or filaments in the flower of *lycopus*, and there are four in that of pennyroyal. But this is a ſlight mark of diſtinction. The form and ſtructure of the flower and of its cup, and the diſpoſition of its ſeeds, agree with thoſe of the other. This is a plain, familiar inſtance of that author's unnatural arrangement of plants: theſe are both in every one's way to examine; and from theſe I appeal to thoſe who yet are inclined to own his ſyſtem, whether *pennyroyal* and *water hoarhound* do not evidently belong to the ſame claſs, though he has ſeparated them into two very remote ones in his works. Every claſs affords many like inſtances.

DIVISION I. BRITISH SPECIES.

Common Water Hoarhound.

Lycopus vulgaris.

The root is compoſed of a multitude of long, white fibres, joined to a ſmall head.

The ſtalk is ſquare, firm, upright, hollow, and two feet high: it is of a pale green, and is rarely branched.

The leaves are placed in pairs; and they have ſhort footſtalks: they are large, broad, oblong, and pointed at the ends: they are very ſharply ſerrated at the edges, and ſinuated deeply near the baſe; and their colour is a ſtrong and lively green.

The flowers are ſmall and white: they ſtand in cluſters round the ſtalks at the joints, where the leaves riſe.

The ſeeds are ſmall and brown.

It is common by ditch-ſides, and flowers in July.

C. Bauhine calls it *Marrubium paluſtre glabrum.* Others, *Marrubium aquaticum.*

It is deſtitute of taſte and ſmell, and, ſo far as we know, of virtue.

DIVISION II. FOREIGN SPECIES.

Narrow-leaved Virginian Lycopus.

Lycopus foliis tenuius ſerratis.

The root is fibrous and ſpreading.

The ſtalks are numerous, ſquare, upright, not much branched, and a foot or more in height.

The leaves are placed in pairs, and are of a faint green: they are broad at the baſe, narrower to the point, and very elegantly ſerrated at the edges.

The flowers are ſmall and whitiſh: the ſeeds are oblong and brown.

It is frequent in the wet grounds in North America, and flowers in June.

Gronovius calls it *Lycopus foliis lanceolatis tenuiſſime ſerratis.*

GENUS

GENUS V.

VERVAIN.

VERBENA.

THE flower is formed of a ſingle petal: it is tubular at the lower part, and toward the upper is bent or crooked; from this part it ſpreads into a kind of gaping mouth; and is divided into five ſegments, which form two irregular lips. The ſeveral ſegments are ſhort, rounded, and nearly equal in length; and there is leſs of the labiated form than in moſt others of this claſs. The cup is tubular and angulated: it is formed of a ſingle piece, divided into five ſegments at the rim; and one of theſe is ſhorter than the reſt. The ſeeds ſtand naked in the cup; and they are oblong and brown.

Linnæus places this among the *diandria monogynia*; the threads in the flower being two, and the ſtyle ſingle.

By this arrangement he joins it in the ſame claſs with the *lycopus*, and ſeparates it far from the other verticillate plants.

DIVISION I. BRITISH SPECIES.

Common Vervain.

Verbena vulgaris.

The root is compoſed of many thick, ſhort fibres, connected to a ſmall oblong head.

The ſtalk is firm, upright, and very tough: its colour is a browniſh green, often red towards the baſe; and it is edged and angulated.

The leaves ſtand in pairs: they are oblong, moderately broad, and deeply ſinuated and indented: the indentings are rounded, and the end of the leaf is obtuſe.

The flowers are ſmall, and of a pale, faint colour, white, with a tinge of bluiſh or purpliſh; and they ſtand in long, ſlender ſpikes at the tops of the ſtalks and branches.

The ſeeds are oblong, ſmall, and brown.

It is common by path-ways, and flowers in June.

C. Bauhine calls it *Verbena communis cæruleo flore.* Others, *Verbena vulgaris*, and *Herba ſacra.*

It is a plant of great virtue, though under a general neglect: it is good againſt diſorders of the nerves; and is ſuperior to moſt things in the cure of inveterate headachs. For this purpoſe the tops ſhould be dried and powdered, and taken for a conſiderable time, twenty grains as a doſe.

The juice boiled to a ſyrup with honey is excellent againſt coughs.

The infuſion, in manner of tea, is good againſt obſtructions of the viſcera, and particularly of the ſpleen.

DIVISION II. FOREIGN SPECIES.

1. Fine-leaved Vervain.

Verbena tenuifolia.

The root is fibrous.

The ſtalks are numerous, weak, and in great part procumbent: they are of a pale green, and angulated.

The leaves are placed in pairs; and they are oblong, moderately broad, and very beautifully divided: they are firſt cut in a pinnated manner; and theſe ſegments are again divided pretty deeply. Their colour is a browniſh green.

The flowers are ſmall, and placed in ſingle, long, and very ſlender ſpikes.

It is a native of Spain, and other warm parts of Europe. It flowers in July.

C. Bauhine calls it *Verbena tenuifolia*; a name copied by moſt others.

This plant is an inſtance of the extreme folly of placing the verticillate plants in diſtinct claſſes from the ſlight differences in the filaments of the flower.

Linnæus ſeparates *vervain* from the reſt of them, becauſe it has only two threads in the flower; whereas they have in general four; but this ſpecies of *vervain* has four threads. That author calls it *Verbena tetrandra*; a contradiction in the moſt expreſs words to his claſſical character wherein *vervain* ſtands, that being *diandria.*

2. Great-flowered American Vervain.

Verbena flore violaceo majore.

The root is long, whitiſh, and full of fibres.

The ſtalk is firm, upright, and of a pale green toward the top, and at the bottom purpliſh.

The leaves are of an oval ſhape, dented at the edges, and of a fine bright green.

The flowers are very numerous and beautiful: they terminate the ſtalks in long ſpikes, with leaves among them; and they are of the ſhape of cowſlips, but of the colour of the violet, a fine deep blue purple.

The ſeeds are long and ſlender.

It is frequent in many parts of North America, and flowers in July.

Plukenet calls it *Verbena orubica tenuifolia.*

GENUS VI.

WILD MARJORAM.

ORIGANUM.

THE flower is formed of a ſingle petal: it is tubular, and compreſſed at the bottom, and at the opening is divided into two lips: the upper lip is undivided, plain, and lightly ſinuated at the end: the lower lip is ſplit into three parts, nearly equal in bigneſs. Numbers of the flowers are placed together in a kind of ſcaly head, ſerving as a general cup. The ſeeds are naked, and four follow every flower.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having four threads, two of which are longer than the others, and the ſeeds ſtanding naked in the cup. He joins ſome other plants with it, which we have treated diſtinctly in their places, reſerving the proper *origanums* to this.

DIVISION I. BRITISH SPECIES.

1. Common Wild Marjoram.

Origanum vulgare.

The root is compoſed of a great many long, ſlender, naked fibres.

The ſtalk is firm, upright, and of a very regular growth: it is not branched; but toward the top ſends out ſome ſhoots in a handſome manner to ſuſtain the flowers: it is uſually of a browniſh colour.

The leaves are placed in pairs, and have very ſhort footſtalks: they are ſhort, broad, nearly of an oval figure, undivided at the edges, and of a browniſh green.

The flowers are ſmall, and of a pale red: they grow in tufts and cluſters from certain leafy heads; and they alſo are purpliſh.

The ſeeds are ſmall and brown.

It is common in dry, hilly paſtures, and by road-ſides in ſuch ſituations. It flowers in July.

C. Bauhine calls it *Origanum ſylveſtre cunila bubula Plinii.* Others, *Majorana ſylveſtris*, and *Origanum vulgare.*

It is an excellent medicine in nervous caſes: it is warm, cordial, and aromatick. The leaves and tops, dried and powdered, are good againſt headachs. The tops of the plant made into a conſerve are good againſt flatulencies and diſorders of the ſtomach and bowels. The whole plant given in infuſion is excellent againſt obſtructions of the viſcera, and in the jaundice.

2. Pot Marjoram.

Origanum onites.

The root is fibrous; and its fibres are long, ſlender, very numerous, and brown.

The ſtalks are numerous and robuſt: they are ſquare, of a brown colour, moderately branched, and a foot and half high.

The leaves are oblong, broad, and of a browniſh green: they have ſhort footſtalks; and they ſtand in pairs.

The flowers ſtand in cluſters at the tops of the branches, and are of a pale red.

It is a native of England, and other parts of Europe, and flowers in July.

We take it into gardens for the ſervice of the kitchen: it is a warm, wholeſome plant, good againſt flatulencies and indigeſtions.

C. Bauhine calls it *Origanum onites*; a name copied by moſt of the other writers. Some call it *Majorana major Anglica.*

DIVISION II. FOREIGN SPECIES.

Long-ſpiked Origanum.

Origanum capitulis longioribus.

The root is fibrous, and brown.

The ſtalk is firm, upright, ſquare, and a foot and half high.

The leaves are oblong, and of a duſky green: they ſtand in pairs, and they are not at all indented at the edges, and their points are obtuſe.

The flowers ſtand at the tops of the ſtalks and branches in long, ſlender ſpikes: they are ſmall, and of a very faint rediſh colour.

The ſeeds are brown and longiſh.

It is a native of the Eaſt, and flowers in July.

C. Bauhine calls it *Origanum Heracleoticum cunila gallinacea Plinii.*

Its taſte is extremely hot; and its virtues are the ſame with the former.

GENUS VII.

SEEBRIGHT.

SCLAREA.

THE flower is formed of a ſingle petal: it is tubular, and compreſſed in the lower part, and gapes at the edge, where it is divided into two lips. The upper lip is long, flatted, and crooked: the lower lip is larger, and is divided into three ſegments: the middle one of theſe is broader than

the others, and is nipped at the end; and ſo is the upper lip. The cup is tubular and ſtriated, formed of a ſingle piece, and at the top compreſſed, and divided into two lips, in the ſame manner as the flower. The upper lip of the cup has three, and the lower has two points. The ſeeds ſtand naked in the cup, whoſe top ſhuts over them. The flowers ſtand in cluſters round the ſtalk; and there are no leaves under them.

Linnæus places this among the *diandria monogynia*; the threads in the flower being two, and the ſtyle ſingle.

This author joins it with *ſage*, not allowing it to be a diſtinct genus; but the naked diſpoſition of the flower is a ſufficient generical diſtinction. The common writers confound it with *clary*, *horminum*; from which it differs as eſſentially, as we ſhall ſhew under the ſucceeding head.

Of this genus there is but one known ſpecies, and that is a native of Britain.

Wild Seebright.

Sclarea pratenſis.

The root is compoſed of numerous, large fibres, connected to an oval head.

The firſt leaves are very large, and of a greyiſh green: they are placed on ſhort footſtalks; and are broad at the baſe, ſmaller to the point, and irregularly indented at the edges.

The ſtalk is robuſt, upright, branched, and two foot and a half high: it is brown, and a little hairy.

The leaves ſtand in pairs on it; and they have ſcarce any footſtalks: they are large, oblong, rough, and irregularly indented at the edges.

The flowers ſtand at the tops of the ſtalks and branches in long ſpikes: they are placed on theſe in circular tufts at diſtances; and there are at the utmoſt only ſome imperfect rudiments of leaves under them: they are very large, and of a beautiful bluiſh purple.

The ſeeds are ſmall and brown.

It is found in damp places, but is not common. It flowers in July.

C. Bauhine calls it *Horminum pratenſe foliis ſerratis*. Others, *Sclarea pratenſis*, and *Sclarea ſylveſtris*.

The ſeeds of this plant put into the eye, bring away any little foulneſſes with them. The practice is antient; but the manner of its effect is little underſtood. As ſoon as the ſeed is put in, the warmth and moiſture of the eye operating upon its own ſubſtance, cover it with a thick and tough mucilage: as it continues moving in the eye, this entangles the little ſubſtances which had got in by accident, and occaſioned the pain; and brings them out with it.

GENUS VIII.

CLARY.

HORMINUM.

THE flower is large, and labiated: it is formed of a ſingle petal, which is tubular, and compreſſed in the lower part, and divided in a gaping manner at the top. The upper lip is long, large, and crooked; the lower lip is divided into three ſegments, the middle one of which is again divided into three parts. The cup is formed of a ſingle piece, and is alſo divided into two lips: it is tubular, and angulated; and one of the lips has two, the other three points. The flowers ſtand in tufts about the tops of the ſtalks with a particular kind of coloured leaves about them; and at the top there uſually are ſome of theſe leaves in cluſters, without any flowers among them. The ſeeds are placed naked in the bottom of the cup.

Linnæus joins this genus and *ſage* together, aboliſhing the received name *horminum*: but the diſtinction is ſufficient, as we ſhall ſhew when treating of *ſage* among thoſe verticillate plants of which no ſpecies are native of England. He places this genus among the *diandria monogynia*; the threads being, as that term expreſſes, two in each flower, and the ſtyle ſingle. He makes the eſſential character conſiſt in the two threads being ſplit or forked; and as this is their form in the *clary* as well as *ſage*, he for that reaſon joins thoſe plants under one name. But in the eye of Reaſon this is a poor occaſion of uniting plants ſo obviouſly different as thoſe: and the more curious enquirer into the ſtructure of flowers will tell him, that there are ſuch variations in the formation of this internal part of the flower in ſome of theſe plants, which in his ſpecies he allows to be *ſalviæ*, as will either remove thoſe ſpecies out of this genus, or this genus out of the claſs.

DIVISION I. BRITISH SPECIES.

1. Broad-leaved Wild Clary.

Horminum ſylveſtre vulgare.

The root is long, ſlender, and furniſhed with numerous fibres.

The firſt leaves are large, rough, and of a duſky green: they are oblong, irregularly divided at the edges, and riſe but a little from the ground.

The ſtalk grows up in the centre; and is ſquare, firm, and two feet high: its colour is brown, and it is not much branched.

The leaves ſtand in pairs, and have ſcarce any footſtalks: they are rough, and of a greyiſh green, and are irregularly waved and indented.

The flowers ſtand at the tops of the ſtalks in long ſpikes, which uſually bend or droop a little: they are ſmall, and of a very fine blue.

The

The ſeeds are black.

It is common in waſte places, and flowers in Auguſt.

C. Bauhine calls it *Horminum ſylveſtre lavendulæ flore.*

It poſſeſſes the virtues of the *garden-clary*, but in an inferior degree; for which reaſon it is not regarded in medicine.

DIVISION II. FOREIGN SPECIES.

Garden-Clary:

Horminum hortenſe.

The root is long, thick, brown, and hung with a few ſtraggling fibres. The colour is brown, and the taſte warm, and not diſagreeable.

The leaves that riſe from it are very large, of a whitiſh green, and rough: they are broadeſt at the baſe; whence they grow ſmaller to the end, where they terminate obtuſely; and they are ſlightly waved at the edges.

The ſtalk is ſquare, firm, upright, and a yard high.

The leaves ſtand in pairs on it; and they are large, rough, and of a greyiſh green: they are placed on footſtalks; and are broad, and a little waved at the edges.

The flowers ſtand at the tops of the ſtalks and branches in long, thick ſpikes; and they are very large, of a gaping figure, and of a pale blue colour. The cups in which they ſtand are glutinous to the touch.

The ſeeds are ſmooth, and of a duſky rediſh brown, oblong, and of a gloſſy ſurface.

It is a native of the Greek iſlands, and is found wild alſo in Apulia. It flowers in July.

C. Bauhine calls it *Horminum ſclarea dictum.* Others, *Horminum hortenſe*, and *Horminum vulgare ſativum.*

This plant is cordial, inciſive, and deobſtruent: It is good againſt flatulencies and indigeſtions, as alſo in nervous complaints, headachs, and lowneſs of ſpirits.

A conſerve of the tops of this plant warms the ſtomach, and operates as a cordial. A diſtilled water of it has alſo the ſame effect; but it muſt be of the ſpirituous kind, for it does not fully give its virtues to water.

It has been a cuſtom to add the leaves to wine in the making: they give it a cordial virtue, and not a diſagreeable flavour.

GENUS IX.

HEDGENETTLE.

GALEOPSIS.

THE flower is formed of a ſingle petal; which is tubular at the bottom, and divided in the labiated manner at the mouth. The tube is ſhort, and between the upper and under lip there is a kind of palate, terminated each way by a little crooked tooth. The upper lip is large, hooked, and undivided: the lower lip is ſhort, broad, and heart-faſhioned, and it turns back. The cup is tubular, and at the top is terminated by five ſlender parts, reſembling briſtles. The ſeeds are four in number; and they remain naked.

Linnæus places this among the *didynamia gymnoſpermia*; the threads in the flower being four, two of which are longer than the others, and the ſtyle ſingle.

This author creates confuſion by his diſtribution of theſe plants. He takes away the name of *galeopſis* from this, making it a ſpecies of *ſtachys*; and he uſes the word *galeopſis*, antiently and diſtinctly given to this plant, as the name of another genus, including the *hempnettles*, and ſome other kinds; of which we ſhall ſpeak hereafter.

DIVISION I. BRITISH SPECIES.

Hedgenettle.

1. *Galeopſis legitima.*

The root is long, ſlender, and creeping: it is white, and ſends out long fibres on every part, from which in ſeparate places riſe numerous plants.

The ſtalk is ſquare, upright, hairy, and of a browniſh green: it is a yard high, and is rarely much branched.

The leaves are placed in pairs: they ſtand at diſtances; and they have footſtalks, which are green, and hairy. The leaves are very broad and ſhort, heart-faſhioned at the ſtalk, and pointed at the end: they are nicked a little at the edges, and their colour is a pale, greyiſh green. Their ſubſtance is rough, the veins are large, and they are hairy.

The flowers ſtand in looſe ſpikes at the tops of the ſtalk; and are large, and of a beautiful purple, agreeably diverſified with dots of white.

The ſeeds are ſmall and brown.

It is common in hedges and among buſhes, and flowers in June and July.

C. Bauhine calls it *Lamium maximum ſylvaticum fœtidum.* Others, *Galeopſis*, and *Galeopſis legitima Dioſcoridis.*

It is a deobſtruent: its principal virtue is againſt obſtructions of the ſpleen; and the beſt method of taking it is the juice freſh preſſed.

2. Small Hedge-nettle.

Galeopſis minor foliis angulatis.

The root is long and thick: it is furniſhed with many fibres, and ſends out many creeping parts, which run under the ſurface, and ſend up plants in various places.

The ſtalk is ſquare, upright, branched, and a foot and half high.

The leaves ſtand in pairs on ſhort footſtalks; and they are large and rough, of an angulated form, and pale green colour.

The flowers are moderately large, and of a bright purple.

The ſeeds are ſmall and brown.

It is not uncommon in woods in our northern counties. It flowers in July.

Plukenet calls it *Lamium ſylvaticum ſpicatum fœtidum folio anguloſo minus.*

DIVISION II. FOREIGN SPECIES.

Hedgenettle with variegated flowers.

Galeopſis flore magno luteo variegato.

The root is compoſed of numerous, thick fibres.

The ſtalk is firm, upright, thick at the joints, and of a pale green.

The leaves ſtand in pairs, and have ſlender footſtalks: they are oblong and broad, largeſt toward the middle, ſmall at the baſe, and ſerrated at the edges. Their colour is a pale green; and they are highly ribbed.

The flowers are very large; and they ſtand in tufts round the tops of the branches, and on the ſummits of them: they are yellow, but variegated on the lip with purple.

This however is an uncertain mark of the plant; for they are ſometimes of a pale yellow throughout, and ſometimes white.

The ſeeds are ſmall and brown.

It is a native of the warmer parts of Europe, and flowers in Auguſt.

Plukenet calls it *Lanium cannabium aculeatum flore ſpecioſo luteo labiis purpureis.*

GENUS X.

CATMINT.

NEPETA.

THE flower is formed of a ſingle petal: it is tubular at the bottom, and crooked; and it gapes at the mouth, and conſiſts there of two lips, and a palate. The upper lip is ſhort, obtuſe, and nipped at the top: the lower lip is undivided, and is larger than the other, and ſerrated. The palate is of a heart-like ſhape, and terminates in two little jaggs. The cup is tubular, and divided into five ſegments at the edge; the upper ones of which are longer than the others, and the lower ones ſpread. The ſeeds are four after every flower; and they ſtand naked in the cup.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having two longer and two ſhorter filaments, and the ſeeds being naked in the cup, without any capſule.

DIVISION I. BRITISH SPECIES.

Catmint.

Nepeta vulgaris.

The root is fibrous and ſpreading.

The ſtalks are ſquare, firm, upright, branched, and two foot and a half high: they are of a whitiſh colour, and ſomewhat duſky.

The leaves ſtand in pairs, and have ſhort footſtalks: they are oblong and large, broad at the baſe, where they are ſomewhat indented, ſerrated ſharply at the edges, and pointed at the end: their colour is a whitiſh green, and they have a very ſtrong ſmell.

The flowers grow in great cluſters at the tops of the ſtalks, forming a kind of ſpike: they are ſmall and white; but they have a few dots of purple within.

The ſeeds are ſmall and duſky.

It is common by way-ſides in dry places, and flowers in July.

C. Bauhine calls it *Mentha cattaria vulgaris & major.* Others, *Nepeta vulgaris.*

It is a very powerful deobſtruent. An infuſion of it is excellent in ſtoppages of the menſes; and it is good alſo in nervous caſes. The tops beat into a conſerve are good againſt that troubleſome and obſtinate diſorder called the *nightmare.*

DIVISION II. FOREIGN SPECIES.

Leſſer Catmint.

Nepeta minor.

The root is long, thick, and hung with many fibres.

The ſtalks are numerous, ſquare, upright, very much branched, and a foot and half high.

The leaves are placed in pairs, and have ſcarce any footſtalks: they are oblong and narrow, ſharp pointed, ſerrated at the edges, and of a pale green.

The flowers ſtand in a kind of irregular ſpikes at the tops of the ſtalks and branches, and are numerous, ſmall, and white, with a faint tinge of purple.

The ſeeds are brown.

It is common in the warmer parts of Europe, and flowers in July.

C. Bauhine calls it *Mentha cattaria minor.*

Common Penny royal

Common Water Hear-hound

Common Vervain

Great flowerd American Vervain

Common Sweet Marjoram

Pot Marjoram

Long Spikd Origanum

Wild Sea bright

Broad leavd wild Clary

Garden Clary

Hedge Nettle

Hedge Nettle with variegated Flowers

Cat Mint

Small Cat mint

Wood Betony

Base Hore hound

Wild Basil

Common Self heal

GENUS XI.

WOOD-BETONY.

BETONICA.

THE flower is formed of a ſingle petal: this is tubular, and crooked at the bottom, and gapes in a labiated manner at the top. The upper lip is ſmall and undivided, and is placed erect; the lower lip is divided into three ſegments; of which the middle one is largeſt, and is nipped at the end. The cup is formed of a ſingle piece; and is tubular, and dented in five places at the rim. The ſeeds are four after each flower, and they ſtand naked in the cup.

Linnæus places this among the *didynamia gymnoſpermia*; two of the four filaments in the flower being longer than the others, and the ſeeds naked.

DIVISION I. BRITISH SPECIES.

Wood-Betony.

Betonica ſylveſtris vulgaris.

The root is brown and fibrous.

The firſt leaves are numerous, and of a dark green: each has its ſeparate footſtalk, which is long and ſlender; and they are ſupported tolerably upright. They are oblong, broad, indented, and obtuſe; and they are a little hollowed where the ſtalk is inſerted.

The ſtalks are numerous, ſquare, upright, and a foot or more in height: there uſually are placed on each ſtalk two pairs of leaves, one pair near the root, and the other at the top: thoſe near the root reſemble the firſt leaves, which riſe ſingly; but the others are narrower.

The flowers grow at the tops of the ſtalks in an interrupted ſpike; and they are moderately large, and of a beautiful purple.

The ſeeds are ſmall, oval, and brown.

It is common in our woods, and among buſhes. It flowers in June.

C. Bauhine calls it *Betonica purpurea*. Others, *Betonica ſylveſtris*.

It is a celebrated medicine in cephalick caſes. The dry tops powdered are good in inveterate headachs, and the ſame given in form of infuſion againſt obſtructions of the viſcera. Some alſo take the leaves powdered in form of ſnuff for headachs; and others have them chopped ſmall, and ſmoak them in the manner of tobacco.

DIVISION II. FOREIGN SPECIES.

Long-ſpiked Betony.

Betonica ſpica longiore.

The root is compoſed of many fibres, riſing from a ſmall head.

The firſt leaves are numerous, and ſupported on long, ſlender footſtalks: they are oblong, narrow, dented at the edges, and pointed at the ends.

The ſtalk is upright, ſquare, and brown.

The leaves on it are narrower than thoſe from the root, and of a paler green.

The flowers ſtand at the top in a very long, ſlender ſpike; and are of a deep purple.

The ſeeds are large, oblong, and rediſh.

It is frequent in the warmer parts of Europe, and flowers in Auguſt.

C. Bauhine calls it *Betonicæ folia capitulo alopecuri*.

GENUS XII.

BASE HOARHOUND.

STACHYS.

THE flower is formed of a ſingle petal, and is of the labiated kind. The tubular part at the bottom is ſhort; and the throat is oblong, and ſwelled out toward the baſe. The upper lip is of an oval figure, and of an arched ſhape: the lower lip is turned back; it is divided into three ſegments, the middle one of which is the largeſt. The cup is tubular, angulated, and divided at the edge into five parts. The ſeeds are oblong and angulated; four ſucceed each flower, and they ſtand naked in the cup.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having two threads longer than the others, and the ſeeds ſtanding naked. He joins the *galeopſis*, as before obſerved, under this name; but they are really diſtinct.

Baſe Hoarhound.

Stachys vulgaris.

The root is a tuft of thick, ſhort, crooked, brown fibres.

The ſtalk is ſquare, firm, and two feet high: it is not much branched, and it often droops at the top.

The leaves ſtand in pairs; and they are oblong, conſiderably broad, dented in a peculiar manner at the edges; ſo that the dents ſeem to lie over one another; and of a whitiſh colour, and hoary.

The flowers ſurround the upper parts of the ſtalks in thick cluſters; and are ſmall and purple.

The ſeeds are oval, angulated, and brown.

We have it in dry grounds in our ſouthern counties, but not frequent. It flowers in Auguſt.

C. Bauhine calls it *Stachys major Germanica.* Others, *Stachys Fuchſii.*

GENUS XIII.

WILD BASIL.

ACINOS.

THE flower is formed of a ſingle petal, and is labiated. The tubular part is of the length of the cup, and the mouth is ſmall. The upper lip is ſmall, obtuſe, nipped at the end, and placed erect: the lower lip is longer, and is divided into three ſegments; the middle one of which is the largeſt, and is nipped at the end. The cup is tubular at the baſe, and divided into two lips at the rim. The ſeeds are ſmall and roundiſh, and four of them follow each flower.

Linnæus arranges this among the *didynamia gymnoſpermia*; the flower having two longer and two ſhorter threads, and the ſeeds being naked.

He takes away the received name *acinos*, and joins it with *thyme*; but it is truly diſtinct, not only in the general form and aſpect of the plant, whence the earlier writers were induced to give it a ſeparate name, but even in the ſtructure of the flower; the middle ſegment of the lower lip being larger and rounder in *acinos* than in *thyme*, and being always nipped or emarginated in this; whereas in *thyme* it is entire.

Our Engliſh name is an ill-conſtructed one. I have preſerved it, becauſe generally received; but it is better to uſe the other, *acinos*.

Wild Baſil.

Acinos foliis oblongis dentatis.

The root is long, ſlender, white, and furniſhed with a few fibres.

The ſtalks are numerous and weak: they lie in part upon the ground, and frequently ſend out fibres, and root as they trail: they are ſquare, ſlender, and rediſh; and they are lightly hairy.

The leaves are ſmall, oblong, hairy, and indented: they ſtand in pairs; and they have no footſtalks.

The flowers are ſmall, but they are not without their beauty: they ſtand in little cluſters in the boſoms of the leaves; and they are red; but they have a white ſpot in the middle of the under lip.

The ſeeds are very ſmall and black.

It is common in our weſtern counties, and flowers in Auguſt.

C. Bauhine calls it *Clinopodium arvenſe ocymi facie.* Others, *Acinos.* J. Bauhine, *Acinos multis.*

It is an excellent medicine in nervous caſes. A tea of it is not unpleaſant, and will take great effect.

GENUS XIV.

SELFHEAL.

PRUNELLA.

THE flower is compoſed of a ſingle petal, and is labiated. The tubular part, at the bottom, is ſhort, and the opening is oblong. The upper lip is entire, and ſtands erect: the under lip is turned backwards, and is divided into three ſegments; the middle one of which is broader than the others, and is nipped at the end, and ſerrated. The cup is formed of a ſingle piece, and is in the ſame manner divided into two lips; and the ſeeds are four after each flower, and ſtand in the cup.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having four threads, of which two are longer than the others, and the ſeeds ſtanding naked.

DIVISION I. BRITISH SPECIES.

Common Selfheal.

Prunella vulgaris.

The root is compoſed of many fibres, connected to a ſmall head.

The firſt leaves are numerous; and they are placed on ſlender footſtalks: they are ſhort, broad, obtuſe, and ſometimes a little waved at the edges.

The ſtalks are ſquare, browniſh, and eight inches

inches high: they are not much branched; and uſually they lie in part upon the ground.

The leaves on theſe are placed in pairs at diſtances: they have ſlender footſtalks: they are of the ſame form with thoſe from the root; and their colour is a lively green.

The flowers ſtand in a kind of ſhort, thick ſpikes at the tops of the ſtalks and branches; and they are ſmall and uſually blue, ſometimes purpliſh, ſometimes red, and ſometimes white.

The ſeeds are ſmall and blackiſh.

It is common by way-ſides, and flowers in July.

C. Bauhine calls it *Prunella major folio non diſſecto*. Others, *Prunella*, and *Prunella vulgaris*.

It is agglutinant and aſtringent. While wound-herbs were in eſteem, this was one of the principal. A decoction of the whole plant is cooling and aſtringent, and is a good medicine in the piles. The juice cures inflammations in the mouth.

DIVISION II. FOREIGN SPECIES.

Jagged Prunella.

Prunella foliis laciniatis.

The root is long, and tolerably thick, and has many crooked fibres annexed to it.

The leaves are numerous, and ſupported on long footſtalks: they are of a pale green; and they are deeply divided in two or more places down to the rib; ſo that they reſemble in ſome degree a ſtag's horn.

The ſtalks are ſquare, tolerably firm, upright, and a foot or more in height.

The leaves on theſe ſtand in pairs at diſtances: the moſt uſual number is only two pairs on each ſtalk, diſpoſed as in the *betony*, one pair at a ſmall diſtance from the ground, the other near the top: theſe reſemble thoſe from the root; but they are leſs.

The flowers ſtand in a ſmall tuft at the top of the ſtalk, and are moderately large: they are ſometimes of a pale red, but more uſually white.

The ſeeds are large and blackiſh.

It is frequent in paſture grounds in the warmer parts of Europe. It flowers in June.

C. Bauhine calls it *Prunella folio laciniato*; a name others have copied.

GENUS XV.

HOREHOUND.

MARRUBIUM.

THE flower is formed of a ſingle petal, and is of the labiated kind. The tubular part, at the baſe, is very ſhort; and the opening at the mouth is long, and gaping. The upper lip is ſmall, and lightly divided at the tip; and it ſtands upright: the lower lip is broader, and is divided into three ſegments; of which the middle one is largeſt; and this turns back. The cup is tubular, and ſpreads at the mouth: there are ten indentings at the edge, alternately larger and ſmaller. Four oblong ſeeds follow every flower; and they are placed naked in the cup.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having four threads, two of which are longer than the others, and the ſeeds being naked.

DIVISION I. BRITISH SPECIES.

White Horehound.

Marrubium album vulgare.

The root is compoſed of a vaſt many long, crooked, and entangled fibres, joined to a ſmall head.

The ſtalks are numerous, upright, ſquare, of a whitiſh colour, and a foot and half high.

The leaves are placed in pairs; and they are roundiſh, indented a little at the edges, of a firm ſubſtance, and of a whitiſh colour.

The flowers ſtand in thick cluſters round the ſtalks at every joint where the leaves grow: they are ſmall and white, and the cups in which they ſtand have a kind of hooked briſtles at the tops of their ſeveral indentings.

When ſtrictly examined, thoſe flowers are found to grow from the boſoms of the leaves, though they join round the ſtalk. The whole plant has a very ſtrong ſmell.

It is found in dry paſtures, and by road-ſides in many parts of the kingdon, and flowers in June.

C. Bauhine calls it *Marrubium album vulgare*. Others only *Marrubium album*.

It is celebrated againſt diſorders of the breaſt. The beſt way of giving it is in form of a ſyrup made of the juice preſſed from the leaves and tops, with honey. This is a form as old as Dioſcorides; and the common method of boiling up a decoction of an herb with ſugar, is not comparable to it on ſuch occaſions. This ſyrup of *horehound* is excellent againſt coughs, and ſoreneſs of the breaſt.

The leaves reduced to powder are ſaid to deſtroy worms in the inteſtines; but for this we have not the ſame authority.

DIVISION II. FOREIGN SPECIES.

Spaniſh Horehound.

Marrubium album calycibus patentibus.

The root is long, thick, and furniſhed with many fibres.

The ſtalk is ſquare, upright, and two feet high, very little branched, and of a whitiſh colour.

The leaves ſtand in pairs, and are of a whitiſh colour, and thick ſubſtance; they are roundiſh, and very lightly indented.

The flowers grow in the boſoms of all the upper leaves, and ſurround the ſtalks: they are ſmall and white.

The cups are very wide at the mouth, and the prickles upon them are ſtrait; not hooked, as in the *common horehound.*

It is not uncommon in Spain and Italy, and flowers in June.

Boccone calls it *Marrubium ſubrotundo folio.*

GENUS XVI.

MOTHERWORT.

CARDIACA.

THE flower is formed of a ſingle petal, and is labiated. The tubular part is ſlender: the upper lip is long, and of an arched form, and rounded at the end; the lower lip is turned back, and is divided into three equal, or nearly equal ſegments. The cup is oblong, tubular, angulated, and formed of a ſingle leaf. The ſeeds are four, and they ſtand naked in the cup.

Linnæus places this among the *didynamia gymnoſpermia*, as the preceding; but he does not allow it to be a diſtinct genus. He joins it with the *leonurus*, and takes away its received and antient name.

Motherwort.

Cardiaca.

The root is compoſed of a multitude of thick, brown fibres.

The firſt leaves are placed on long footſtalks; and they are large, broad, and ſhort: they have three principal diviſions, and their colour is a dark green.

The ſtalk is ſquare, hollow, upright, branched, and a yard high.

The leaves on this are placed in pairs; and they are oblong, indented at the edges, and ſharp-pointed.

The flowers are ſmall, and have a purpliſh tinge: they grow in thick tufts at the joints.

The ſeeds are brown, and rounded on one ſide.

It is common in waſte places, and flowers in July.

C. Bauhine calls it *Marrubium cardiaca dictum.* Linnæus, *Leonurus foliis caulinis trilobis lanceolatis.*

It is a good medicine in hyſterick caſes. It promotes the menſes, and is very uſeful againſt fits. The beſt way of giving it is in form of a conſerve, made of the freſh tops. It may be alſo taken in way of tea; but that way it is unpleaſant.

GENUS XVII.

TUFTED BASIL.

CLINOPODIUM.

THE flower is formed of a ſingle petal, and is of the labiated kind. The tubular part is ſhort, and it ſpreads out into a mouth: the upper lip ſtands erect; and is hollowed, obtuſe at the end, and nipped in the middle: the lower lip is divided into three ſegments; and of theſe the middle one is largeſt. The cup of each flower is tubular, a little crooked, and divided into two lips: but, beſide theſe, there is a kind of general cup or covering to the whole cluſter of flowers growing together; and this is formed of a vaſt multitude of hairs. The ſeeds are four after every flower; and they ſtand naked in the cup.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having two longer and two ſhorter threads, and the ſeeds ſtanding naked. Our Engliſh name is a very imperfect one; for which reaſon it is more proper to uſe the Latin, *clinopodium.*

Great Wild Baſil.

Clinopodium majus.

The root is fibrous, and runs a great way under the ſurface.

The firſt leaves are placed on ſlender footſtalks; and they are roundiſh, obtuſe, hairy, and of a pale green.

The ſtalks are ſquare and weak: they are a foot or more in length, but ſcarce able to ſupport themſelves: they are not much branched; and their colour is a pale green. The leaves are placed in pairs on the ſtalk; and they are ſhort, broad, obtuſe, and a little indented.

The flowers are of a pale red.

It is common under hedges, and flowers in Auguſt.

C. Bauhine calls it *Clinopodium origano ſimile.* Others, *Acinos.*

Its virtues are not known.

GENUS XVIII.

DEADNETTLE.

LAMIUM.

THE flower is labiated, and is formed of a ſingle petal. The tubular part at the baſe is very ſhort: the opening of the mouth is wide, and is formed into two lips and a palate. The upper lip is of an arched form, and undivided, and turns in a kind of arch: the lower lip is ſhorter, and nipped at the end; and it turns back. The palate is inflated, compreſſed, and terminated each way by a little jagg. The cup is tubular, and it is terminated by five briſtles. The ſeeds are four after every flower; and they are naked in the cup.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having two threads longer than the other two, and ſeeds remaining naked in the cup without any capſule or particular covering.

DIVISION I. BRITISH SPECIES.

1. White Deadnettle.

1. Lamium album vulgare.

The root is fibrous and creeping.

The ſtalk is ſquare, hollow, upright, not branched, and a foot and half high.

The leaves are placed in pairs; and they are of a fine bright green: they are oblong, broad, ſharp-pointed, and ſharply ſerrated.

The flowers ſtand in the boſoms of the leaves; and they are large and white, a little hairy, and diſtinguiſhed very prettily by the black edges of the buttons on the filaments, which in ſome manner mark the arithmetical figure 8.

The ſeeds are four after every flower; and they are blackiſh. The whole plant has a ſingular, but not diſagreeable ſmell.

It is common under hedges, and in all cultivated ground. It flowers in June.

C. Bauhine calls it *Lamium album non fœtens folio oblongo*. Others only *Lamium album*. Our common people call it *Deadnettle*, and *Archangel*.

The whole herb is ſubaſtringent. The roots, dried and powdered, are good in fluxes; but the principal virtue is in the flowers: theſe are at once ſubaſtringent and balſamick. A conſerve made of them with ſugar is excellent againſt the *fluor albus*. It is a family-medicine, but very well deſerves to be received in the ſhops. I have known great cures performed in this troubleſome and obſtinate complaint by this conſerve, and a decoction of comfry root.

2. Red Deadnettle.

Lamium vulgare rubrum.

The root is a little tuft of fibres.

The firſt leaves are ſmall, roundiſh, and indented: they ſtand on ſlender rediſh footſtalks; and are of a duſky green.

The ſtalks are ſquare and hollow: they are a foot long, but they do not ſtand upright: they lean and trail in the lower part upon the ground: they have uſually a few leaves about the bottom, like thoſe from the root; and about two pairs of others, placed at diſtances, one pair near the bottom, the other near the top. At the ſummit there are two or three other pairs, among which riſe the flowers.

Theſe are ſmall and red.

The ſeeds are brown.

It is common about gardens, and wherever ground has been dug. It flowers from April to October.

C. Bauhine calls it *Lamium purpureum fatidum folio ſubrotundo*. Others only *Lamium rubrum*.

3. Red Deadnettle with divided leaves.

Lamium rubrum foliis diſſectis.

The root is fibrous and brown.

The firſt leaves are placed on ſlender footſtalks; and they are broad, ſhort, and deeply divided by about five irregular indentings.

The ſtalk is of a pale green, and not very firm, ten inches high, and hollow.

The leaves are placed in pairs on ſhort footſtalks; and they are broad, ſhort, and deeply divided.

The flowers ſtand in the boſoms of the leaves; and they are ſmall and red.

The ſeeds are brown.

It is not uncommon on plowed land, and it flowers in May.

Ray calls it *Lamium rubrum minus foliis profunde inciſis*.

4. Great Henbit.

Lamium folio caulem ambiente.

The root is ſmall and fibrous.

The firſt leaves are ſupported on ſlender footſtalks; and they are broad, ſhort, and waved at the edges: frequently alſo there riſe a kind of ſuckers from the root, each ſupporting ſix or eight of theſe leaves.

The ſtalks are numerous, ſquare, hollow, and about five inches in length: they are not much branched, and they trail upon the ground.

The leaves on theſe are unlike thoſe from the root: two naturally grow at a joint; but they unite, and form a kind of ſingle roundiſh leaf, through which the ſtalk runs in a perfoliate manner.

The flowers are ſmall, and of a pale red: they ſtand in the boſoms of the leaves.

The ſeeds are oblong and brown.

It is common on ground that has been plowed or dug. It flowers in July.

C. Bauhine calls it *Lamium folio caulem ambiente*.

Authors ſpeak of a leſſer ſpecies; but it is only a variety.

5. Yellow Deadnettle.

Lamium flore flavo.

This i a plant of regular growth, and of great beauty.

The root creeps under the ſurface, and has many long, thick fibres.

The ſtalks are ſquare, light, hollow, and a foot or more in height; they ſeldom grow perfectly erect, but trail or ſtoop a little.

The leaves ſtand in pairs; and are oblong, moderately broad, elegantly ſerrated, and of a fine green.

The flowers are large, and of a beautiful yellow: they riſe in conſiderable number in the boſoms of the leaves.

The ſeeds are oblong and brown.

It is frequent in the dry ditches which ſurround woods, and elſewhere among buſhes. It flowers in June.

C. Bauhine calls it *Lamium folio oblongo luteum.* Others, *Lamium flavo flore.*

6. Hemp-Deadnettle.

Urtica foliis anguſtis ſerratis.

The root is creeping and fibrous.

The ſtalk is ſquare, hollow, light, and a foot or more in length. Its colour is brown; and it is covered with a kind of briſtles.

The leaves ſtand two at a joint; and they have ſlender footſtalks: they are oblong, narrow, ſharp pointed, and ſharply ſerrated; and they have on the under ſide very large ribs: they have been ſuppoſed from this and from their colour, which is a duſky green, to reſemble the ſingle leaves of hemp.

The flowers are large and gaping: they are of a bright red; and they are placed in tubular cups, terminated by a kind of prickles: they ſtand in tufts at the tops of the ſtalks and branches.

The ſeeds are large and blackiſh.

It is common about corn-fields, and on ground that has been dug. It flowers in July.

C. Bauhine calls it *Urtica aculeata foliis ſerratis.* Others, *Cannabis ſpuria.*

7. Narrow-leaved Yellow Deadnettle.

Lamium luteum foliis anguſtioribus ſerratis.

The root is creeping, white, and hung with many fibres.

The ſtalks are ſlender, ſquare, and about a foot high: they are rarely branched; and their colour is a dark green or brown.

The leaves are placed in pairs, and have ſlender footſtalks: they are long, and very narrow, deeply ſerrated, and of a faint green.

The flowers grow all the way up in the boſoms of the leaves; and they are large, and of a pale yellow.

The ſeeds are ſmall and brown.

We have it in woods in Suſſex. It flowers in September.

Ray calls it *Lamium luteum foliis anguſtiſſimis.*

8. Great-flowered Hemp-Deadnettle.

Lamium cannabino folio flore magno.

The root is long and ſlender, and has many fibres.

The ſtalk is weak, ſquare, branched, and two feet in length.

The leaves are broad and oblong: they are deeply jagged, ſharp-pointed, and of a very bright green.

The flowers ſtand about the tops of the branches in cluſters growing in the boſoms of the leaves: they are very large, and of a ſnowy white.

The ſeeds are large and blackiſh.

We have it about the edges of foreſts. It flowers in July.

Ray calls it *Cannabis ſpuria flore albo magno eleganti.*

9. Hemp-Deadnettle with variegated flowers.

Lamium folio cannabino floribus variegatis.

The root is compoſed of numerous, long, and ſlender fibres.

The ſtalk is ſquare, firm, hairy, and two feet and a half in height.

The leaves ſtand in pairs; and they are long, narrow, of a dark green, and ſharply ſerrated.

The flowers are placed in a kind of ſpikes at the tops of the ſtalks, and beautifully variegated with white, red, and yellow.

It is common in the northern counties, and flowers in July.

Ray calls it *Lamium cannabino folio flore amplo luteo labio purpureo.*

DIVISION II. FOREIGN SPECIES.

Indian Deadnettle.

Lamium foliis diſſectis orientale.

The root is compoſed of numerous, long, brown fibres, very tough, and of a diſagreeable ſmell.

The ſtalk is upright, ſquare, and of a browniſh colour.

The leaves are placed in pairs at diſtances; and they are very beautiful. Their colour is a fine green; and they are deeply divided at the edges.

The flowers ſtand in cluſters in the boſoms of the upper leaves; and are large and beautiful.

The ſeeds are large and purpliſh.

It is a native of the Eaſt Indies, and of the Greek iſlands, and flowers in Auguſt.

Tournefort calls it *Lamium orientale foliis elegantèr laciniatis.*

GENUS XIX.

BASTARD BAUM.

MELISSOPHYLLUM.

THE flower is labiated, and is formed of a ſingle petal. The tubular part is long and ſlender: the upper lip is large, rounded, and placed upright: the lower lip is broad and obtuſe. The cup is hollowed, and large, and at the top is divided into two lips. The ſeeds are four after every flower; and they ſtand naked.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having two longer and two ſhorter threads, and the ſeeds ſtanding naked in the cup. This author allows it to be a diſtinct genus; but he alters the received name, writing it *melittis*.

There is but one known ſpecies of this genus; and that is common to Britain, and all the northern parts of Europe.

Baſtard Baum.
Meliſſophyllum.

The root is compoſed of numerous, thick fibres, of an acrid and bitteriſh taſte.

The ſtalk is ſquare, upright, firm, and a foot and half high: it is of a duſky green colour, and full of pith.

The leaves are conſiderably large, broad, oblong, of a duſky green colour, and of a rough ſurface: they are placed in pairs, and have ſlender footſtalks.

The flowers riſe in the boſoms of the leaves; and they are large and purple.

The ſeeds are uneven, large, and brown.

It is common in the woods of Devonſhire, and ſome other of the adjoining counties, and flowers in Auguſt.

C. Bauhine calls it *Lamium montanum meliſſæ folio*. Others, *Meliſſa*, and *Meliſſophyllum*.

It is ſaid to be a cephalick; but its virtues are not well eſtabliſhed.

GENUS XX.

ALLHEAL.

SIDERITIS.

THE flower is labiated, and is formed of a ſingle petal. The tubular part is very ſhort: the upper lip is rounded and turned, and is a little nicked at the edge; the lower lip is divided into three unequal ſegments. The cup is tubular, formed of a ſingle piece, and terminated by five points. The ſeeds are four after every flower; and they ſtand naked.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having two threads longer than the others, and the ſeeds ſtanding naked.

DIVISION I. BRITISH SPECIES.

1. Broad-leaved Little Allheal.
Sideritis pumila folio latiore.

The root is long, ſlender, white, and furniſhed with a few fibres.

The firſt leaves are placed on ſlender footſtalks: they are oblong, broad, and indented at the edges: their colour is a pale green, and they have a faint ſmell.

The ſtalks are ſquare, weak, and branched: they are ſix or eight inches long; and they ſometimes ſtand erect, ſometimes lie upon the ground.

The leaves on them are ſet in pairs; and they are oblong, broad, ſerrated, and of a pale green.

The flowers ſtand in the boſoms of the leaves, and are ſmall: their colour is a pale red; but they are ſpotted on the inſide with purple.

The ſeeds are brown.

It is common in our corn-fields, and flowers in July.

C. Bauhine calls it *Sideritis alſines triſſaginis folio.*

2. Clown's Allheal.
Sideritis fœtida ſtrumoſa radice.

The root is compoſed of numerous, irregular, tuberous pieces, connected by brown, thick fibres.

The ſtalk is upright, hairy, of a pale green, ſquare, not much branched, and two feet high.

The leaves ſtand in pairs: they are oblong, narrow, ſerrated at the edges, hairy, and of a pale green.

The flowers are very numerous: they ſtand in ſeparate cluſters round the upper part of the ſtalk, and together form a kind of ſpike: they are purple; but the lower lip is ſpotted with white.

The ſeeds are angulated, ſmall, and blackiſh.

It is common in damp places, and flowers in Auguſt.

C. Bauhine calls it *Stachys paluſtris fœtida.* The common writers, *Sideritis Anglica ſtrumoſa radice.*

The fresh leaves bruised are very eminent as a vulnerary: they stop the bleeding of a fresh wound, and without any other application heal it.

3. Broad-leaved yellow Allheal.

Sideritis lat folia flore flavo.

The root is composed of small white fibres.

The first leaves are supported on slender foot-stalks; and they are short, broad, a little indented at the edges, and of a dusky green.

The stalk is square, ho low, of a faint green, and about a foot high.

The leaves stand in pairs on it; and they are oblong and broad: their colour is a bright green, and they are indented at the edges.

The flowers rise in tufts in the bosoms of the leaves; and they are moderately large and yellow.

The seeds are oblong, cornered, and brown.

It is not uncommon in our northern counties in cultivated land. It flowers in July.

Ray calls it *Sideritis arvensis latisolia hirsuta lutea.*

4. Narrow-leaved red Allheal.

Sideritis anguſtifolia flore rubente.

The root is long, slender, and furnished with many fibres.

The first leaves are numerous: they are oblong, narrow, of a brownish green, and indented at the edges: these quickly wither.

The stalk is square, of a purplish colour, and a foot high.

The leaves stand in pairs; and they are narrow, oblong, of a deep green, and serrated.

The flowers are small and red: they are placed in tufts about the tops of the stalks; and each is variegated with two white spots on the lower lip.

The seeds are small and brown.

It is common in corn fields, and flowers in July.

C. Bauhine calls it *Sideritis arvensis anguſtifolia rubra.* Others, *Ladanum segetum.*

All these are supposed to be excellent against fresh wounds.

DIVISION II. FOREIGN SPECIES.

Canary Allheal.

Sideritis latisolia Canariensis.

The root is long, thick, and brown; and it is hung with many fibres.

The first leaves are placed on long, slender, reddish footstalks; and they are oblong, broad, and of a pale green, obtuse at the end, a little crenated at the edges, and dented for the stalk at the base.

The stalk is shrubby, firm, upright, and not much branched.

The leaves on it are placed in pairs; and they have long, slender footstalks: they resemble those from the root, but they are smaller; and they are of a whitish colour, and soft to the touch.

The flowers stand in tufts in the bosoms of the upper leaves; and they are small and white.

The seeds are brown.

It is a native of the Canaries, and flowers in July.

Commelin calls it *Stachys Canariensis frutescens verbasci folio.*

It is esteemed an astringent and vulnerary.

GENUS XXI.

CALAMINT.

CALAMINTHA.

THE flower is labiated, and is formed of a single petal. The tubular part at the base is cylindrick and even. The upper lip is divided at the extremity into three points: the lower lip is divided into three segments; and of these the middle one is largest, and is heart-fashioned. The cup is hollow, tubular, and formed also into two lips. Four seeds follow every flower; and they stand naked in the cup. The whole plant is of a strong, and not agreeable smell, and of an acrid taste.

Linnæus places it among the *didynamia gymnospermia*; the threads in the flower being two longer and two shorter, and the seeds having no covering but the cup. He does not allow *calamint* to be a distinct genus, but makes the several kinds of it species of *baum* or *melissa.*

1. Common Calamint.

Calamintha vulgaris.

The root is composed of numerous, brown fibres.

The stalks are woody, and a foot or more in height, very much branched, and of a whitish colour.

The leaves are placed in pairs; and they are roundish, a little waved, or irregularly notched at the edges, and of a brownish green.

The flowers are moderately large, and of a bluish white: they stand in clusters in the bosoms of the upper leaves.

The seeds are small and brown.

It is common by way-sides, and flowers in July.

C. Bauhine calls it *Calamintha vulgaris vel officinarum Germaniæ.* Others, *Calamintha major.*

2. Smaller Calamint.

Calamintha odore pulegii.

The root is slender, and hung with many fibres.

The stalks are branched, and near a foot high: they are firm, hard, upright, and of a whitish colour.

The leaves are very numerous: they are placed in

White Horehound

Mother wort

Great wild Basil

White Deadnettle

Red Deadnettle

Red Deadnettle with Divided Leaves

Great Nettle

Yellow Deadnettle

Hemp Deadnettle

Bastard Baum

Downy Allhead

Broad leavd little Allhead

Smooth Allhead

Ground Ivy

Stinking Horehound

Common Gipsie

Lesser Gipsie

Smaller Gilamint

Common Gilamint

in pairs; and they are ſmall, and of an oblong, or ſomewhat oval form: they are of a whitiſh colour; and have a ſtrong ſmell, between that of the *common calamint* and *pennyroyal*.

The flowers grow from the boſoms of the leaves at the tops of the plant; and they are ſmall and white.

The ſeeds are brown.

It is common by way-ſides with the former, and flowers in July.

C. Bauhine calls it *Calamintha pulegii odore ſive nepeta*. Others, *Calamintha minor*. Our people, *Field-calamint*.

Both this and the former are excellent medicines in hyſterick complaints: they promote the menſes; and are good againſt obſtructions of the viſcera.

They may be taken dried and powdered; but the better method is in a ſtrong infuſion in the manner of tea. A conſerve may alſo be made of the tops.

GENUS XXII.

GROUND-IVY.

HEDERA TERRESTRIS.

THE *flower is* labiated, and is formed of a ſingle petal. The tubular part is ſlender and compreſſed. The upper lip is upright and ſimple: it is obtuſe at the end, and a little ſplit: the lower lip is divided into three ſegments; and the middle one of theſe is larger than the others, and nipped at the end. The cup is formed of a ſingle piece; and is tubular, and divided into five parts at the rim. The ſeeds after each flower are four in number, and oval.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having two longer and two ſhorter threads, and the ſeeds ſtanding naked.

He takes away the received name from the genus, and calls it *glechoma*.

1. Common Ground-Ivy.

Hedera terreſtris vulgaris.

The root is a tuft of long crooked fibres.

The ſtalks are numerous, weak, hairy, ſquare, of a brown colour; and they trail upon the ground, and take root at the joints. There alſo riſe with them a number of ſmall, running ſhoots, which root at their ends; and the plant is thus propagated in abundance.

The leaves are placed in pairs; and they have ſlender footſtalks: where they firſt ſhoot they are rediſh, afterwards of a duſky green, and hairy: they are of a roundiſh figure, crenated at the edges, and ſomewhat pointed.

The flowers are moderately large and blue: they riſe from the boſoms of the leaves: they are followed each by four ſmall oval ſeeds.

The plant is common on ditch-banks, and flowers in April. That is the time where it has its full virtue.

C. Bauhine calls it *Hedera terreſtris vulgaris*. Others, *Calamintha humilior folio rotundiore*.

It is an excellent pectoral and deobſtruent. A conſerve of the freſh-gathered tops with ſugar is good againſt coughs. A ſyrup made of the juice with honey is uſeful in aſthmas. The juice preſſed with white wine is alſo ſerviceable in the jaundice; and an infuſion taken in large doſes operates powerfully and ſafely by urine, bringing away gravel, and cleanſing the ureters.

The juice ſnuffed up the noſe is celebrated againſt the headach. Malt-liquor in which this herb is put, is called *gill-ale*, from *gill*, an Engliſh name of the plant. It has ſome virtue from it, but is not comparable to the other forms.

2. Purple-flowered Ground-Ivy.

Hedera terreſtris montana flore purpuraſcente.

The root is compoſed of innumerable brown, ſlender, crooked fibres.

The ſtalks are numerous, thick, but weak, of a purpliſh colour, and procumbent.

The leaves have long footſtalks: they are placed in pairs; and they are large, roundiſh, dented, of a pale green, and very hairy.

The flowers ſtand in the boſoms of the leaves; and they are large and purple.

It is not uncommon in woods in our northern counties, and elſewhere. It flowers in April.

C. Bauhine calls it *Hedera terreſtris montana*; a name moſt others have copied.

Some have thought it only a variety of the common kind; but it appears to be a diſtinct ſpecies by ſowing.

GENUS XXIII.

STINKING HOARHOUND.

BALLOTE.

THE flower is labiated: it is formed of a ſingle petal. The tubular part is cylindrick, and of the length of the cup. The upper lip is hollow, undivided, but dented at the tip, and obtuſe: the lower lip is obtuſe, and is divided into three ſegments; the middle one of which is larger than the others, and is nipped at the end. The cup is tubular, and marked with ten ridges, and is

divided into five points at the edge. Beſide this cup to every flower, there is a general involucrum for each cluſter of flowers; which is compoſed of narrow leaves, and divided in halves.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having two longer and two ſhorter threads, and the ſeeds ſtanding naked.

DIVISION I. BRITISH SPECIES.

Stinking Hoarhound.
Ballote fœtida vulgaris.

The root is thick, long, and furniſhed with many fibres.

The ſtalks are numerous, ſquare, and upright: they are light, hollow, and a yard high.

The leaves are placed in pairs: they have ſlender footſtalks; and they are of a rounded figure, and dark green colour, indented at the edges, ſoft to the touch, and hairy.

The flowers are of a pale purple: they ſtand in cluſters in the boſoms of the leaves ſurrounding the ſtalks.

It is common in waſte grounds, and flowers in June.

C. Bauhine calls it *Marrubium nigrum fœtidum ballote Dioſcoridis*. Others, *Ballote*.

This is one of thoſe plants which poſſeſs great and unregarded virtues. It is one of the beſt remedies in medicine for hypochondriac and hyſterick complaints. It may be taken in form of a conſerve made of the freſh-gathered tops, and in infuſion in the manner of tea.

DIVISION II. FOREIGN SPECIES.

Woolly Ballote.
Ballote caule lanato.

The root is long, divided, and furniſhed with many fibres.

The ſtalk is ſquare, hollow, and upright; of a whitiſh colour, and covered with a woolly matter.

The leaves ſtand in pairs; and they are broad, and deeply divided into three or five ſegments.

The flowers are large and white.

It is a native of Siberia, and flowers in Auguſt.

Amman, to whom we owe the knowledge of this ſingular plant, calls it *Ballota foliis Geranii batrachoidis*.

GENUS II.

HOODED WILLOWHERB.

CASSIDA.

THE flower is labiated: it is formed of a ſingle petal. The tubular part is very ſhort, and turns backward. The opening is long, and flatted alſo. The upper lip is hollow, and divided into three ſegments. The cup is tubular, and undivided at the mouth, where it has a kind of ſcale that falls over the opening to preſerve the ſeeds. This has the ſhape of a head-piece, and ſerves as a ſeed-veſſel; and this alone will abundantly diſtinguiſh the plant. The ſeeds are four after every flower; and they ſtand naked in the cup, under the ſhelter of this moſt ſingular covering.

Linnæus places this among the *didynamia gymnoſpermia*; there being two longer and two ſhorter threads in the flower, and the ſeeds having no capſule. The plant perfectly agrees with the reſt in the character of the claſs, which is, that the ſeeds lie in the cup without a ſeed-veſſel; but it does not well anſwer to the term deviſed by this author to expreſs it; for they are not naked, though they have no capſule.

1. Common Caſſida.
Caſſida vulgaris.

The root is ſmall and creeping: it is jointed at certain diſtances, and ſends fibres from thoſe joints.

The ſtalk is ſquare, upright, branched, and about ten inches high.

The leaves ſtand in pairs, and have ſcarce any footſtalks: they are oblong, broad at the baſe, narrower all the way to the point, and ſerrated at the edges.

The flowers are large, and of a fine violet blue: two of them grow together from the boſoms of the leaves, and they hang drooping.

The ſeeds are ſmall and duſky; and they are covered in the cup with a ſhelly ſubſtance, like a head-piece.

It is common by the ſides of ditches, and flowers in July.

C. Bauhine calls it *Lyſimachia cærulea galericulata ſive gratiola cærulea*. Others, *Tertianaria*, and *Caſſida vulgaris*.

2. The Leſſer Caſſida.
Caſſida minor flore purpuraſcente.

The root creeps under the ſurface: it is jointed, and ſends out fibres from thoſe joints.

The ſtalk is ſquare, upright, branched, and about ſix inches high: it is ſtriated, and of a reddiſh colour.

The leaves ſtand in pairs; and are broad, ſhort, and indented.

The flowers are purple; and they grow from the boſoms of the leaves.

The ſeeds are four: and they are covered in the cup by a kind of head-piece, as in the former inſtance.

It is common about waters, and flowers in June.

Ray calls it *Caſſida paluſtris minima flore purpuraſcente.*

The leaves of the *caſſida* dried and powdered were a famous remedy for agues before the bark was known; but they are now diſuſed.

GENUS XXV.

GROUND-PINE.

CHAMÆPITYS.

THE flower is formed of a ſingle petal, and is labiated. The tubular part is ſhort, and the upper lip is deeply divided into two ſegments. The lower lip is divided into three ſegments; of which the middle one is largeſt, and is rounded. The cup is tubular, formed of a ſingle piece, divided into five parts; and riſing on one ſide at the baſe. The flowers grow from the boſoms of the leaves; and the ſeeds are four after every flower, and roundiſh.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having two longer and two ſhorter threads, and the ſeeds being naked in the cup.

He does not allow this to be a diſtinct genus; but places it with the *ſcordium chamædrys*, and ſeveral others, under the common name of *teucrium.*

DIVISION I. BRITISH SPECIES.

Common Ground-Pine.

Chamæpitys vulgaris.

The root is long, ſlender, and divided.

The ſtalks are numerous, weak, and three inches high: they are of a greyiſh colour, very much branched, and covered thick with leaves.

Theſe ſtand in pairs at ſmall diſtances; and they have numerous young ones in their boſoms: they are of a pale yellowiſh green, oblong, narrow, and at the end divided into three points.

The flowers riſe from the boſoms of the leaves; and are ſmall and yellow: but the upper lip is ſpotted with purple on the inſide.

The ſeeds are ſmall, black, and round.

The whole plant has a reſinous ſmell and taſte.

It is frequent in ſome parts of the kingdom on chalky and other dry ſoils. It flowers in July.

C. Bauhine calls it *Chamæpitys lutea vulgaris ſive folio trifido.*

Ground-pine is an excellent medicine in nervous diſorders. It is a powerful diuretick; and it promotes the menſes.

The tops dried and powdered are recommended againſt the gout; and there are well-authoriſed accounts of great cures having been performed by them in the ſciatica.

DIVISION II. FOREIGN SPECIES.

Auſtrian Ground-Pine.

Chamæpitys cærulea Auſtriaca.

This is a very beautiful plant.

The root is long, thick, divided, and hung with many fibres.

The ſtalks are numerous, and ten inches high, ſquare, of a whitiſh colour, and downy.

The leaves ſtand at diſtances two at each joint, but with cluſters of young ones in all their boſoms: they are divided into three or four long and narrow ſegments; and are of a lively green on the upper ſide, and paler underneath.

The flowers grow from the boſoms of the leaves toward the upper part of the plant: they are very large: the body of them is of a delicate violet blue; and the under lip is whitiſh, and ſpotted with crimſon.

The ſeeds are large and roundiſh.

It is frequent on the mountains of Germany, and flowers in June.

C. Bauhine calls it *Chamæpitys cærulea Auſtriaca.*

GENUS XXVI.

BUGLE.

BUGULA.

THE flower is formed of a ſingle petal, and is of the labiated kind. The tubular part is cylindrick and bent. The upper lip is very ſmall: it ſtands erect, and is ſplit in two parts. The lower lip is divided into three ſegments: the middle one is large, and heart-faſhioned: the two ſide ones are very ſmall. The cup is ſmall; and is formed of a ſingle piece, divided into five parts at the edge. The ſeeds are four: they are oblong, and they have no defence but the cup.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having two longer and two ſhorter threads, and the ſeeds having no capſule. He takes away the received name *bugula*, and calls it *ajuga.*

1. Bugle.

1. Bugle.

Bugula vulgaris cærulea.

The root is compoſed of numerous fibres, and it ſends out creeping ſhoots.

The ſtalk is ſquare, upright, not at all branched, and about ten inches high.

The leaves are placed in pairs, and are of a fine green: they are broad, oblong, and indented at the edges.

The flowers ſtand in cluſters in the boſoms of the upper leaves from the middle to the top, and ſometimes all the length of the ſtalk; ſo that together with the leaves they form a kind of thick ſpike: they are ſmall and blue.

The ſeeds are roundiſh, and of a deep brown.

It is common in our meadows, and flowers in June.

C. Bauhine calls it *Conſolida media pratenſis cærulea.* Others, *Bugula vulgaris.*

It ſtands celebrated in all the old writers as a wound-herb.

A decoction of it is good againſt obſtructions of the viſcera, and in the jaundice. It operates by urine in a certain and ſafe manner.

2. Mountain-Bugle.

Bugula folio longiore.

The root is compoſed of numerous, long fibres.

The ſtalks riſe ſeveral together; and they are ſlender, but upright, ſquare, of a purpliſh colour, and not at all branched.

The leaves are placed in pairs; and they are oblong, and moderately broad: they have no footſtalks: they are narroweſt at the baſe, and broadeſt toward the point; and have on each ſide three or four deep indentings.

The flowers grow in the boſoms of the leaves; and they are ſmall and blue.

The ſeeds are round and blackiſh.

It is found on the Welch mountains, and flowers in July.

C. Bauhine calls it *Conſolida media cærulea Alpina.* Others, *Bugula cærulea Alpina.*

GENUS XXVII.

WOOD-SAGE.

SCORODONIA.

THE flower is formed of a ſingle petal, and is of the labiated kind. The tubular part is ſhort and cylindrick. The upper lip is divided into two ſegments: the lower lip is divided into three; of which the middle one is largeſt, and is of a rounded form. The cup is tubular, and lightly divided into five parts. The ſeeds are four, and they remain naked in the cup. The leaves reſemble *ſage*, and the ſmell is like that of garlick.

Linnæus places this among the *didynamia gymnoſpermia*; there being two longer and two ſhorter threads in the flower, and the ſeeds ſtanding naked in the cup.

Of this genus there is but one known ſpecies, and that is a native of Britain.

Linnæus does not allow the genus to be diſtinct. He confounds it among many others, under the common name *teucrium*; but it is ſufficiently diſtinguiſhed in Nature.

Wood-Sage.

Scorodonia vulgaris.

The root is long, divided, and ſpreading; and is furniſhed with many fibres.

The ſtalk is ſquare, upright, firm, not much branched, and two feet in height.

The leaves are placed in pairs: they have ſhort footſtalks; and they are broad, oblong, and ſomewhat like thoſe of ſage, but of a rougher ſurface, and pale green colour.

The flowers ſtand in long ſpikes at the tops of the ſtalks and branches; and they are ſmall and greeniſh, with purple buttons to the filaments.

The ſeeds are little and brown.

It is common in woods, and flowers in July.

C. Bauhine calls it *Scordium alterum ſive ſalvia agreſtis.*

It is a powerful deobſtruent; and it operates by ſweat and urine. The beſt way of giving it is in form of an infuſion.

It was at one time celebrated againſt venereal complaints; but the uſe of mercurial remedies has now ſet aſide all others in thoſe diſorders.

GENUS XXVIII.

WATER GERMANDER.

SCORDIUM.

THE flower is formed of a ſingle petal, and is labiated. The tubular part at the baſe is ſhort. The upper lip is ſplit into two ſegments; and the lower lip is divided into three: the two of theſe at the ſides are ſmall; but the middle one is rounded and large. The cup is formed of a ſingle piece: it is tubular, and ſlightly divided into five ſegments. The ſeeds after each flower are four; and they ſtand naked in the cup. The ſtalks are procumbent; and the leaves are downy.

Linnæus

Linnæus places this among the *didynamia gymnoſpermia:* the flower having two longer and two ſhorter filaments, and the ſeeds being naked. He does not allow it to be a diſtinct genus, but makes it one of the ſpecies of *teucrium*. Of the *ſcordium*, properly diſtinguiſhed by theſe characters, there is but one known ſpecies, and that is a native of Britain.

Water-Germander.

Scordium.

The root is compoſed of numerous fibres.

The ſtalks are ſquare, weak, eight or ten inches long; and they lie either entirely or in part upon the ground: they ſend roots from the joints, where they reſt upon the ground; and thus the plant ſpreads over a great deal of ſpace in a little time.

The leaves ſtand in pairs, and have no foot-ſtalks: they are oblong, moderately broad, dented at the edges, of a pale greyiſh green, and ſoft to the touch.

The flowers grow in the boſoms of the leaves; and they are ſmall and red.

The ſeeds are minute and brown.

It is common in the Iſle of Ely, and in ſome other parts of the kingdom on damp ground. It flowers in June.

C. Bauhine calls it only *Scordium*. Others, *Scordium verum*, and *Scordium legitimum*.

It is celebrated as a ſudorifick, and has a place in ſome of the principal compoſitions of the ſhops.

It has the credit of being an excellent medicine in malignant and peſtilential fevers. To this purpoſe it is to be given dried and powdered.

The juice preſſed out with white wine is good in obſtructions of the viſcera; and it is ſaid, given alone, to be a remedy againſt worms in the inteſtines.

SERIES II.

FOREIGN GENERA.

Thoſe of which there is no ſpecies naturally wild in this country.

GENUS I.

SAGE.

SALVIA.

THE flower is formed of a ſingle petal, and is labiated. The tubular part is ſmall at the baſe, and thence becomes wider, and compreſſed. The upper lip is hollow, crooked, compreſſed, and nipped at the extremity. The lower lip broad, and divided into three ſegments; the middle one of which is large, and nipped at the end. The cup is tubular, ſtriated, and divided alſo into two lips at the top: the upper one of theſe has three, and the lower has two points. The ſeeds are four after every flower; and they are naked in the cup.

Linnæus ſeparates this from the generality of the verticillate plants, and places it among the *diandria monogynia*; the filaments in the flower being two, and the ſtyle ſingle. There is ſomething ſo ſingular in the ſtructure of theſe filaments, that the plant, according to this method, appears to be very nearly allied to the *didynamia*; for theſe two filaments are ſplit each into two branches; one of which in each is longer, and ſupports a button; and the other ſhorter, and has in its place only a uſeleſs appendage.

1. Common Sage.

Salvia hortenſis vulgaris.

The root is long and thick, and is furniſhed all about with innumerable fibres.

The firſt leaves are very numerous: they are ſupported on long footſtalks; and they are oblong, broad, of a rough ſurface, and of a rediſh colour: they are ſomewhat dented at the edges; and they are of a ſtrong, but very agreeable taſte and ſmell.

The ſtalks are ſquare, rediſh, firm, very much branched, and a foot and half high.

The leaves on theſe reſemble thoſe from the root; but they have ſhorter footſtalks.

The flowers are placed in a kind of ſpikes at the tops of the ſtalks and branches; and they are large and blue, often tinged with purple.

The ſeeds are moderately large.

The tops of the plant have a fragrant reſin about them, which ſticks to the fingers; and theſe have more of the fine taſte and ſmell of the plant than any other part.

It is a native of the warmer parts of Europe, and flowers in July.

C. Bauhine calls it *Salvia major aut ſphacelus Theophraſti*. Others, *Salvia latifolia*. Our gardeners, *Red ſage*.

It is a very good medicine againſt diſorders of

the head and nerves; and for that purpoſe no way is better than the common one, of taking it in tea. In this manner, drank in large quantities, it is alſo diaphoretick; and good in feveriſh diſorders.

The Italians eat it as a preſervative of health, and ſay a man need not die that has *ſage* in his garden. Our people, from the ſame principle, eat *ſage* on bread and butter; and there is no better way of taking it. Some prefer the *ſage of virtue* to the common kind; but their qualities are nearly the ſame; and this is the more pleaſant.

2. Sage of Virtue.

Salvia minor.

The root is long, thick, woody, and furniſhed with many fibres.

The firſt leaves are placed on ſlender foot-ſtalks; and they are oblong, moderately broad, of a greyiſh green colour, and rough ſurface; and at the baſe of each there uſually and naturally grow two ſmall ones, called ears; but theſe are ſometimes wanting.

The ſtalks are numerous, ſquare, ſlender, branched, and a foot or more in height.

The leaves on them reſemble thoſe from the root; but they are ſmaller.

The flowers ſtand at the tops of the ſtalks in long, looſe ſpikes; and they are of a fine pale blue.

The ſeeds are moderately large.

It is a native of Spain.

C. Bauhine calls it *Salvia minor aurita et non aurita*. Others only *Salvia minor*. Our gardeners, *Sage of virtue*.

Many prefer it to the *common ſage* for the ſame purpoſes.

3. Candy-Sage.

Salvia anguſtifolia Cretica.

The root is woody, and hung with numerous fibres.

The ſtem is woody and round; but the young branches are ſquare.

The leaves are oblong, narrow, and of a pale green: ſometimes they are a little dented at the edges, at others not at all, and ſome have a double large indenting near the baſe, in reſemblance of the ears of the other *ſage*.

The flowers ſtand in looſe ſpikes at the tops of the branches; and are of a faint whitiſh purple. The cups are obtuſe, and the ſeeds that follow are large.

It is a native of the Greek iſlands, and flowers in July.

C. Bauhine calls it *Salvia baccifera*. Others, *Salvia pomifera*. And our gardeners, *Apple-ſage*, or *Berry-bearing ſage*.

All that is natural to the plant we have here deſcribed; but it remains to explain the phraſe *apple-bearing ſage*.

There is a fly in the Greek iſlands, whoſe young is hatched upon this plant, in excreſcences raiſed by the puncture of its parent. Every one knows the galls produced on our oak; and few are ignorant of their origin. A fly wounds the young ſhoot of the tree; and the part ſwells from the poiſonous juice left by her in the wound, and riſes into this round ſubſtance, called a *gall*. So in Crete a fly wounds the *ſage*, a gall is formed, and from its ſhape it is called an *apple*. They err who ſuppoſe it the fruit of the plant, for it has no fruit but the four ſeeds in each cup.

4. Æthiopian Sage.

Salvia lanuginoſa Æthiopica.

The root is long, thick, and hung about with fibres.

The firſt leaves are large, and nearly as broad as they are long, of a whitiſh colour; and ſo covered with a woolly matter, that they loſe the outline of their ſhape.

The ſtalk is ſquare, upright, and branched: it is thick ſet with leaves, and is covered with the ſame white woolly matter.

The leaves on the ſtalk reſemble thoſe from the root, and are as thickly covered with the woolly matter.

The flowers riſe from the boſoms of the upper leaves; and are of a ſnowy whiteneſs; but the buttons on the tops of their threads are yellow.

The ſeeds are four after every flower; and they lie naked in the cup.

It is a native of Greece, Africa, and ſome of the hotteſt parts of Europe.

C. Bauhine calls it *Æthiopis foliis ſinuoſis*. Others, *Sclarea Æthiopica*; and ſome, *Æthiopian mullein*.

It is diſtinctly and properly a ſpecies of *ſage*.

The leaves are ſometimes altogether undivided, ſometimes cut in at the edges, and this in a ſlighter or deeper manner; and from hence authors have named one or two imaginary ſpecies. They are only accidental varieties of the ſame plant.

GENUS XIX.

LAVENDER.

LAVENDULA.

THE flower is labiated, and is formed of a ſingle petal. The tubular part is cylindrick, and longer than the cup. The upper lip is larger than the under, and is ſplit into two parts: the under lip is divided into three rounded ſegments of equal ſize. The cup is ſhort: it is formed of a ſingle piece; and is obſcurely dented at the edge. The ſeeds are of an oval ſhape, and four follow every flower; and the flowers ſtand in naked ſingle ſpikes.

Linnæus places this among the *didynamia gymnoſpermia*; the threads in the flower being two longer

and two ſhorter, and the ſeeds ſtanding naked in the cup. He joins the *ſtœchas* and this under one common genus; but the ſpiked flowers of the *lavender* are ſufficiently diſtinguiſhed from the others by their plain, ſimple ſtructure, and by the want of that ſingular, coloured leaf the *ſtœchas* has at the top.

1. Common Lavender.

Lavendula vulgaris.

The root is woody, long, thick, and furniſhed with numerous fibres.

The plant riſes in form of a low, buſhy ſhrub. The main ſtem is covered with a rough, grey bark; and the long young ſhoots are green.

The leaves are long, narrow, and undivided at the edges, of a pale green colour, and of a very ſtrong and aromatick ſmell.

The flowers grow at the tops of all the ſhoots in ſpikes: they are ſmall, and of a beautiful blue: theſe tops, with the flowers, have an extremely fragrant ſcent.

The ſeeds are ſmall and brown.

It is a native of the warmer parts of Europe. We keep it in gardens for its fragrance and its virtues.

C. Bauhine calls it *Lavendula latifolia*. Others, *Lavendula vulgaris*.

The tops of the plant, gathered juſt as the flowers are opening, poſſeſs its full virtues: they are excellent in nervous diſorders, good againſt headachs and paralytick complaints, and extremely cordial and ſtrengthening.

In vertigoes it is of great ſervice, and againſt tremblings of the limbs. It alſo operates by urine, and promotes the menſes.

A conſerve of theſe tops is a very good method of uſing them. The ſpirit called *ſpirit of lavender* alſo poſſeſſes their virtues very fully; and has the advantage of many other good ingredients of the ſame intention. This is beſt taken on ſugar.

2. Small Lavender.

Lavendula anguſtifolia minor.

The root is long, firm, woody, and hung about with innumerable fibres.

The plant riſes like the *common lavender* in a ſhrubby form.

The leaves are numerous; and they are oblong, very narrow, and of a freſh and lively green: they have the ſmell of *lavender* leaves, but leſs ſtrong.

The flowers ſtand in ſhort ſpikes at the tops of the branches; and they are larger than in the *common lavender*, and of a pale blue.

The ſeeds are ſmall and dark.

It is common in the ſouth of France, and in all the warmer parts of Europe. It flowers in Auguſt.

C. Bauhine calls it *Lavendula anguſtifolia*. Others, *Lavendula minor*, and *Spica*.

An oil made from this uſed to be brought over from Italy, and here called *oil of ſpike*.

It has the ſame virtues with the former, but in an inferior degree.

3. Jagged-leaved Lavender.

Lavendula foliis diſſectis.

The root is woody, irregular, and covered over with fibres.

The plant is ſhrubby, and a foot and half high.

The ſtalks are ſquare, and of a pale green, often toward the bottom rediſh.

The leaves are very beautifully divided in the pinnated manner; and the ſmall parts reſembling pinnæ are again divided or nicked at the edges: they are of a whitiſh colour, and of an extremely fragrant ſmell.

The flowers are blue, and very fragrant: they ſtand in ſhort ſpikes upon the tops of long, naked ſhoots in the manner of thoſe of the *common lavender*; and they have the ſame fragrant ſmell.

The ſeeds are ſmall and brown.

It is a native of Spain, and flowers early in the ſummer.

C. Bauhine calls it *Lavendula folio diſſecto*. Others, *Lavendula multifido folio*.

Its virtues are the ſame with thoſe of *common lavender*, but in an inferior degree.

GENUS III.

STŒCHAS.

THE flower is labiated, and formed of a ſingle petal. The tubular part is cylindrick, and longer than the cup. The upper lip is ſplit into two parts, and is larger than the under. This laſt is divided into three roundiſh equal ſegments. The cup is ſmall, of an oval figure, and very obſcurely dented at the edges. The ſeeds are four after every flower; and they are ſmall and oblong. The flowers are collected into a ſpike, formed of ſeveral regular ſeries, and terminated at its top by a beautiful, coloured leaf.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having two longer and two ſhorter threads, and the ſeeds ſtanding naked in the cup.

This author joins it in the ſame genus with *lavender*; but it has its antient ſeparate name; and there is enough in Nature to ſupport the diſtinction.

1. Common

1. Common Stœchas.

Stœchas vulgaris.

The root is woody, and compoſed of numerous fibres, connected to an oblong head.

The plant riſes in form of a ſmall ſhrub, two feet high, and divided into many branches.

Theſe are ſquare while young; but they loſe that form as they grow older and harder.

The leaves are oblong, narrow, of a whitiſh colour, and of a very fragrant ſmell.

The flowers grow in thick, ſhort ſpikes; forming with their cups, and the leaves which ſupport them, a kind of ſcaly head; at the top of which ſtands a very beautiful leaf, of a deep purple.

The flowers are ſmall and purple; and the whole head has a very fine ſmell, and a highly aromatick taſte.

It is a native of France, Spain, and Italy; and is alſo abundant in the Eaſt. It flowers in July.

C. Bauhine calls it *Stœchas purpurea*. Others, *Stœchas Arabica*, and *Spica hortenſis*. Our people call it *Arabian ſtœchas*, *Caſſidony*, and ſome *French lavender*.

The ſpikes of flowers ſhould be gathered for uſe juſt before they come into full bloom. They poſſeſs the ſame virtues with *lavender*; but they are more cordial, and of a lighter and more agreeable flavour.

2. Jagged-leaved Stœchas.

Stœchas foliis dentatis.

The root is long, thick, woody, and hung round with abundance of fibres.

The plant is ſhrubby, very much branched, and two feet high.

The leaves are very beautiful: they are oblong, narrow, and deeply ſerrated or notched all along the edges. Their colour on the upper ſide is a lively green, and on the under part they are whitiſh: the edges often turn, and appear curled. The whole leaf has a very fragrant ſmell and aromatick taſte.

The flowers are placed in thick, ſhort ſpikes, in the manner of thoſe of the *common ſtœchas*; and they are ſmall and purple.

The ſpike is in the ſame manner terminated by a purple head, which is formed of three or four irregular leaves.

It is a native of the warmer parts of Europe, and flowers in June.

C. Bauhine calls it *Stœchas folio ſerrato.*

GENUS IV.

ROSEMARY.

ROSMARINUS.

THE flower is labiated, and is formed of a ſingle petal. The tubular part is longer than the cup. The upper lip is ſmall, and is ſplit into two parts, the edges of which turn back. The under lip is large, and turns back: it is divided into three ſegments; the middle one of which is largeſt, and is hollowed. The cup is divided into two lips. The ſeeds are four after every flower, and they ſtand naked in the cup.

Linnæus places this among the *diandria monogynia*; the threads in the flower being two, and the ſtyle ſingle.

Common Roſemary.

Roſmarinus vulgaris.

The root is woody, long, divided, and hung with numerous fibres.

The plant riſes into a ſmall ſhrub: the ſtem is woody, and is covered with a brown, rough bark. The young ſhoots are of a greyiſh green.

The leaves are numerous, and of a firm ſubſtance: they are oblong, narrow, ſharp-pointed, not at all indented at the edges, and of a very fragrant ſmell: they are of a very beautiful green on the upper ſide, and of a ſilvery grey underneath.

The flowers riſe in great numbers from the boſoms of the leaves toward the upper part of the branches: they are large, and of a pale blue, variegated with white.

The ſeeds are ſmall, and of an oblong ſhape.

The whole plant has a fragrant and aromatick ſmell: it is lighter, and more delicate in the flowers, and ſtronger in the leaves. The taſte alſo is warm and aromatick, and not diſagreeable.

It is a native of the warmer parts of Europe, and flowers in ſpring.

C. Bauhine calls it *Roſmarinus hortenſis anguſtiore folio.* Others, *Anthos*; and ſome, *Libanotis coronaria.*

It is a ſhrub of very conſiderable virtues.

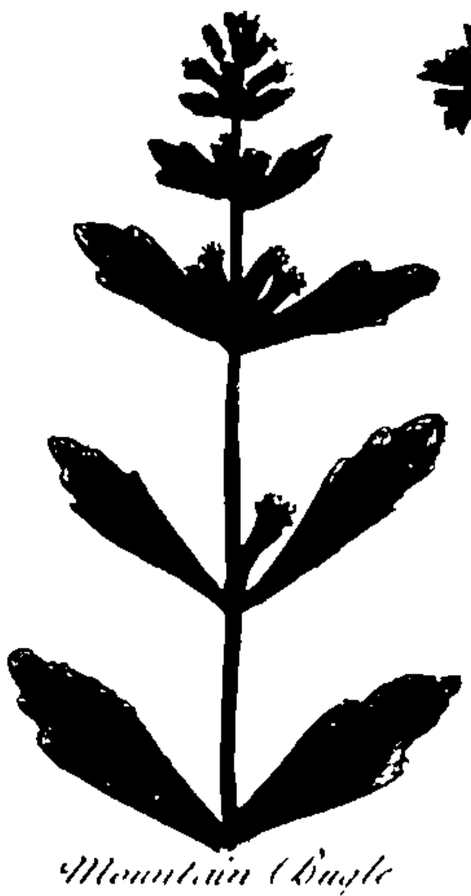
It is excellent in all nervous diſorders, againſt vertigoes, dizzineſs of the head, and tremblings of the limbs. For this purpoſe no form of giving it is better than a conſerve made of the tender tops freſh gathered, and beat up with ſugar.

It is alſo good againſt obſtructions of the viſcera, and in paralytick diſorders.

Hungary-water is made by diſtilling a pure ſpirit from the tops of this plant, or in a coarſer way, by mixing a few drops of its oil in ſuch a ſpirit.



Mountain Bugle



Bugle



Austrian Ground Pine



Common Ground Pine



Royal Sage

Spidy Sage



Sage of Virtue



Common Sage



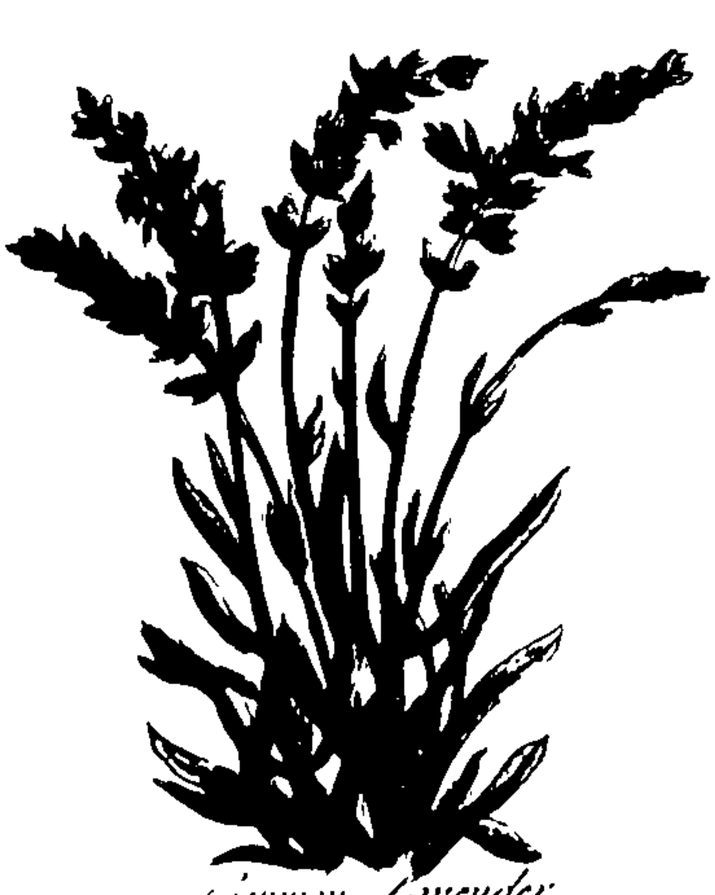
Lavendium



Jagged Leaved Lavender



Small Lavender



Common Lavender



Ethiopian Sage



Common Hyssop



Common Rosemary



Jagged Leaved Thistle



Common Thistle

GENUS V.

HYSSOP.

HYSSOPUS.

THE flower is labiated, and is formed of a ſingle petal. The tubular part is of the length of the cup. The upper lip is ſhort, undivided, and juſt nipped at the end; and it ſtands erect. The lower lip is larger, and is divided into three parts; the middle one of theſe is broader than the others, and is heart-faſhioned. The cup is long, tubular, ſtriated, and dented in five parts at the edges. The ſeeds are four after every flower; and they are of an oval form, and placed naked in the cup.

Linnæus places this among the *didynamia gymnoſpermia*; the threads in each flower being two longer and two ſhorter, and the ſeeds placed in the cup without any capſule.

Common Hyſſop.

Hyſſopus vulgaris.

The root is compoſed of numerous, long, thick fibres, connected to an oblong head.

The ſtalks are ſquare, upright, hard, and branched.

The leaves are placed in pairs; and they are oblong, narrow, and of a pale green: they ſtand thick together upon the ſtalks; and there are uſually many young leaves riſing from their boſoms.

The flowers ſtand at the tops of the ſtalks in a kind of looſe ſpikes, with leaves among them: they are large and blue.

The ſeeds are ſmall and brown.

It is a native of Italy, and the warmer parts of Europe, and flowers in Auguſt.

C. Bauhine calls it *Hyſſopus officinarum cærulea ſive ſpicata*. Others, *Hyſſopus Arabum*, and *Hyſſopus vulgaris*.

It is a plant of very conſiderable virtues. It is excellent againſt diſorders of the breaſt and lungs. A ſyrup of *hyſſop* made with honey is good in aſthmatick caſes, and in coughs.

It is alſo good againſt obſtructions of the viſcera; and it works by urine.

GENUS VI.

SAVORY.

SATUREIA.

THE flower is formed of a ſingle petal, and is labiated. The tubular part is ſhorter than the cup. The upper lip is nipped at the extremity, and placed upright: the lower lip is divided into three ſegments; the middle one of which is broader than the others; but they are all of a length. The cup is tubular, ſtriated, and nipped in five parts at the extremity. The ſeeds are four after every flower; and they are of a roundiſh form, and ſtand naked in the cup.

Linnæus places this among the *didynamia gymnoſpermia*; the threads in the flower being two longer and two ſhorter, and the ſeeds naked in the cup.

1. Summer Savory.

Satureia æſtiva.

The root is compoſed of a vaſt number of fibres, connected to a ſmall head.

The ſtalks are numerous, upright, brown, divided into branches, and ten inches high.

The leaves are oblong, narrow, and of a duſky green: they ſtand in pairs at diſtances on the ſtalks; and they have an aromatick ſmell and taſte.

The flowers riſe from the boſoms of the upper leaves; and they are ſmall, and of a faint rediſh colour, often nearly white.

The ſeeds are roundiſh and brown.

It is a native of the ſouth of France, and flowers in July.

C. Bauhine calls it *Satureia hortenſis, ſeu Cunila ſativa Plinii.*

It is principally uſed as a pot-herb; but it has virtues that might recommend it as a medicine. It is good in diſorders of the head and nerves, and againſt obſtructions of the viſcera. The tops, when in flower, poſſeſs the principal virtue.

2. Winter Savory.

Satureia durior.

The root is long, divided, and furniſhed with numerous fibres.

The ſtalks are numerous, woody, very much branched, and a foot and half high: the harder parts of them are of a pale brown; the young ſhoots green.

The leaves are very numerous: they ſtand in pairs, with cluſters of young leaves and ſhoots in their boſoms.

The flowers grow from the boſoms of the upper leaves; and they are ſmall and white, with a faint bluſh of purpliſh.

It is a native of Italy, and is kept in our gardens for the ſervice of the kitchen.

C. Bauhine calls it *Satureia montana*. Others, *Satureia durior*, and *Satureia Hyberna*.

3. The Thyme of the Antients.

Saturcia foliis punctatis.

This plant, though uſually called a kind of *thyme*, and diſtinguiſhed by that name in ſome antient authors, is properly a ſpecies of *ſavory*.

The root is long, thick, divided, and furniſhed with numerous fibres.

The ſtalks are upright, branched, hard, and woody.

The leaves are placed in pairs, with numbers of ſmall ones in their boſoms; and they are ſmall, oblong, narrow, hollowed, edged, and dotted: they are of a greyiſh green colour, and of a warm aromatick taſte.

The flowers grow in ſhort cluſters, or little heads, at the tops of the branches; and they are ſmall and purpliſh.

The ſeeds are little, roundiſh, and dark-coloured.

It is a native of the Greek iſlands, and of the warmer parts of Europe. It flowers in June.

C. Bauhine calls it *Thymus capitatus qui Dioſcoridis*. Others, *Thymum legitimum*, and *Thymum antiquorum*.

It is a fine warm aromatick plant, and is good againſt obſtructions of the viſcera, and in headachs, and all nervous complaints.

GENUS VII.

HERB-MASTICK.

MARUM.

THE flower is labiated, and is formed of a ſingle petal. The tubular part is of a cylindrick form, and is ſhorter than the cup. The upper lip is of the ſame length with the lower, and is placed upright: it is obtuſe, and nicked at the end. The lower lip is divided into three ſegments, of which the middle one is ſomewhat broadeſt. The cup is tubular, ſtriated, and terminated at the rim by five briſtles. The flowers are collected in a kind of woolly heads; and four roundiſh ſeeds follow each, which ſtand naked in the cup.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having four threads, two of which are longer than the others, and the ſeeds ſtanding naked.

This author does not allow it to be a diſtinct genus, but calls it a kind of *ſatureia*: it is however very ſufficiently diſtinguiſhed by the briſtles or hairs that terminate the cup; and properly retains its ſeparate name.

Common Herb-Maſtick.

Marum vulgare.

The root is long, ſlender, and hung about with fibres.

The ſtalks are numerous, ſquare, ſlender, brittle, upright, branched, and of a browniſh colour.

The leaves ſtand in pairs, and have no foot-ſtalks: they are oblong, moderately broad, ſharp-pointed, not at all dented at the edges, and of a fine lively green. Their taſte is very acrid.

The flowers ſtand at the tops of all the branches in ſhort, woolly heads, of a whitiſh colour.

It is a native of Spain, and flowers in Auguſt.

C. Bauhine calls it *Sampſuchus ſive Marum Maſticben redolens*. Others, *Marum vulgare*.

It is a warm aromatick plant, and is good in nervous diſorders.

The bark of the old ſhoots is aſtringent, and excellent againſt the overflowings of the menſes.

GENUS VIII.

GOATS MARJORAM.

TRAGO ORIGANUM.

THE flower is formed of a ſingle petal, and is labiated. The tubular part is of the ſame length with the cup. The upper lip is broad, and divided at the top into three little points: the lower lip is longer, and is divided into three ſegments; of which the middle one is broader than the others. The cup is in the ſame manner divided into two lips. The ſeeds are ſmall: four follow every flower.

Linnæus places this among the *didynamia gymnoſpermia*; the threads being four, two longer and two ſhorter, and the ſeeds naked.

Goats Marjoram.

Trago origanum folio oblongo anguſto.

The root is compoſed of innumerable fibres.

The ſtalks are numerous, upright, ſquare, branched, and about ten inches high.

The leaves are placed in pairs at ſmall diſtances, and with young ſhoots in their boſoms; ſo that the plant is very well covered with them: they are oblong, narrow, and of a whitiſh colour; and they have a ſtrong ſmell, and an aromatick taſte.

The flowers are large and white: they ſtand in a kind of ſpikes at the tops of the ſtalks and branches.

The ſeeds are ſmall, round, and black.

It is a native of Spain, and other of the warmer parts of Europe, and flowers in June.

C. Bauhine calls it *Trago origanum anguſtiſolium.* Others, *Trago origanum Hiſpanicum.*

It is a warm and aromatick plant, and is recommended for promoting the menſes; but it is little regarded.

GENUS IX.

POLEYMOUNTAIN.

POLIUM.

THE flower is formed of a ſingle petal, and is labiated. The tubular part is ſhort, and at the top a little bent. The upper lip ſtands erect, and is ſplit into two ſegments, which gape aſunder. The lower lip is divided into three parts; of which the middle one is largeſt, and is rounded at the end. The cup is tubular, divided lightly at the rim into five ſegments, and ſwelled on one ſide at the baſe. The ſeeds are four after every flower; and they ſtand naked in the cup. The flowers are collected into ſhort cluſters, which terminate the branches.

Linnæus places this among the *didynamia gymnoſpermia*: the threads in the flower being four, of which two are longer than the others, and the ſeeds remaining naked in the cup.

This author does not allow it to be a diſtinct genus; but calls it a kind of *teucrium*. It is ſufficiently diſtinguiſhed from *teucrium* by the diſpoſition of the flowers, and has a right to retain its old name.

1. Yellow Poleymountain.

Polium flore flavo.

The root is long, divided, and furniſhed with numerous fibres.

The ſtalks are firm, ſquare, and ten inches high: part of them lie upon the ground for half their length; others ſtand tolerably erect, and the plant uſually ſeen in large handſome tufts.

The leaves are placed in pairs; and they are oblong, conſiderably broad, obtuſe, and dented at the edges: they are of a faint green colour; and are covered with a white, downy matter.

The flowers are ſmall and yellow: they are placed together in ſhort ſpikes at the tops of the ſtalks and branches; and, before they open, the whole tops look yellowiſh.

The ſeeds are ſmall, roundiſh, and dark-coloured.

It is a native of Italy, and ſome other parts of Europe. It flowers in July.

C. Bauhine calls it *Polium montanum luteum.* Others, *Polium luteum.* Some, *Polium vulgare.*

2. White Poleymountain.

Polium flore albo folio anguſtiore.

The root is compoſed of many long and ſlender fibres.

The ſtalks are numerous; and they ſpread themſelves into a circular tuft, the greater part lying upon the ground, and the beſt of them not being very upright.

The leaves are placed in pairs; and they are oblong, narrow, woolly, and white: they are ſharp-pointed, and a little indented; but it is not ſeen unleſs they are examined nearly.

The flowers are ſmall and white: they ſtand in thick ſpikes at the tops of the ſtalks; and theſe ſpikes or heads are woolly.

The ſeeds are ſmall and blackiſh.

It is a native of France and Italy, and flowers in Auguſt.

C. Bauhine calls it *Polium erectum maritimum Monſpeliacum.* Others, *Polium album.*

3. Purple Poleymountain.

Polium flore purpuraſcente.

The root is long, thick, woody, divided, and furniſhed with numerous fibres.

The ſtalks are hard, but weak: they lie upon the ground, and are very much branched.

The leaves are oblong, narrow, obtuſe at the end, and indented at the edges: they are covered with a white, woolly matter; as are alſo the ſtalks.

The flowers are ſmall, and of a lively purple: they are collected in thick, woolly tufts at the tops of the ſtalks and branches.

The ſeeds are ſmall, roundiſh, and black.

It is a native of Italy, and flowers in Auguſt.

C. Bauhine calls it *Polium maritimum Venetum.*

4. Lavender-leaved Poleymountain.

Polium folio longiore anguſto integro.

The root is long, ſlender, and hung about with fibres.

The ſtalks are numerous, ſquare, and in part procumbent.

The leaves are long, narrow, and undivided at the edges: they are placed in pairs upon the ſtalks; and are of a lively green on the upper ſide, and white and hoary underneath.

The flowers are large and white: they are collected into thick tufts or heads at the tops of the ſtalks.

The ſeeds are large and roundiſh.

It is a native of Italy, and flowers in July.

C. Bauhine calls it *Polium montanum lavandulæ folio*; a name moſt other writers have copied.

All theſe poſſeſs the ſame virtues; but the white kind has them in the greateſt perfection.

It is a warm cordial medicine, and is good againſt obſtructions of the viſcera. It works by ſweat and urine.

GENUS X.

TREE GERMANDER.

TEUCRIUM.

THE flower is formed of a ſingle petal, and is labiated. The tubular part is cylindrick and ſhort. The upper lip is ſplit into two ſegments, and ſtands erect: the lower lip is divided into three parts; of which the middle one is largeſt, and of a roundiſh figure. The cup is tubular, divided into five ſegments at the rim, and ſwelled on one ſide at the baſe. The ſeeds after each flower are four: and they ſtand naked in the cup.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having four threads, of which two are longer than the others, and the ſeeds remaining naked in the cup. This author joins many other genera with the *teucrium* under its common name; but we have ſeparated them. They have been already treated of in their proper places; and what we have here to conſider, is the proper *teucrium* only.

1. Tree-Germander.

Teucrium latifolium.

The root is long, thick, and furniſhed with a great many fibres.

The ſtalks are numerous, ſquare, firm, upright, two feet high, and conſiderably branched.

The leaves are placed in pairs: they have no footſtalks: they are broad, ſhort, ſharp-pointed, dented at the edges; and of a beautiful green on the upper ſide, and hoary underneath.

The flowers are large, and of a pale yellow: they grow from the boſoms of the leaves all along the upper parts of the ſtalks.

The ſeeds are ſmall and brown.

It is a native of Italy, and flowers in June.

C. Bauhine calls it *Teucrium*. Others, *Teucrium latifolium*, and *Teucrium vulgare*.

It is a cordial and alexipharmick, operating by ſweat; and is eſteemed good in putrid and peſtilential fevers.

2. Spaniſh Tree-Germander.

Teucrium Bæticum folio undulato.

This is a tall and beautiful plant.

The root is woody, long, and divided into numerous parts, and furniſhed with many fibres.

The ſtem is woody, five feet high, and divided into many branches.

The leaves are placed in pairs: they are oblong, conſiderably broad, not at all dented at the edges, obtuſe at the end, and joined to the ſtalks without footſtalks. Their colour is a dark green on the upper ſide, and they are greyiſh underneath.

The flowers are numerous, large, and beautiful: they are of a ſnow-white.

It is a native of Spain and Sicily, and flowers in July.

C. Bauhine calls it *Teucrium peregrinum folio ſinuoſo.*

GENUS XI.

GERMANDER.

CHAMÆDRYS.

THE flower is formed of a ſingle petal, and is labiated. The tubular part is ſhort. The upper lip is ſplit deeply into two parts; and the lower part is divided into three ſegments; of which the middle one is largeſt, and is of a rounded figure. The cup is tubulated, and lightly divided by five nicks at the edge. The ſeeds are roundiſh, and four follow every flower. The flowers grow from the boſoms of the leaves, not in tufts, terminating the branches.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having two longer and two ſhorter threads, and the ſeeds ſtanding naked. He does not allow it to be a diſtinct genus; but places it among many others under the name *teucrium*.

Common Germander.

Chamædrys vulgaris.

The root is compoſed of long, ſlender, tough fibres.

The ſtalks are ſquare, and hard: they lie in part upon the ground: they are conſiderably branched, and a foot or more in length.

The leaves are placed in pairs, and they are oblong, broad, indented at the edges, ſharp-pointed, and of a fine green.

The flowers are ſmall and red: they riſe from the boſoms of the leaves all over the upper part of the plant.

The ſeeds are ſmall, roundiſh, and of a dark brown.

It is common in France, and moſt other parts of Europe. It flowers in June.

C. Bauhine calls it *Chamædrys minor repens*. Others, *Chamædrys vulgaris*.

It is celebrated for many virtues, but is very much neglected in the preſent practice. It operates by urine, and is good againſt obſtructions of the viſcera. It is alſo good in fevers.

Summer Savory

The Thyme of the Antients

Herb mastich

Goats Marjoram

y. Most Potey Mountain

White Potey Mountain

Purple Potey Mountain

Lavender leaved Potey Mountain

Shee Germander

Spanish Tree Germander

Common germander

Sweet Marjoram

Common Basil

Great Basil

Smooth Holmes Baum

Prickly Holmes Baum

Common Baum

GENUS XII.

DITTANY OF CRETE.

DICTAMNUS.

THE flower is formed of a ſingle petal, and is labiated. The tubular part is compreſſed. The upper lip is undivided, rounded at the end, and placed erect: the lower is divided into three nearly equal ſegments. The cup is general, containing many flowers, and is a kind of looſe ſcaly head, which hangs drooping. The ſeeds are four after every flower; and they are ſmall, and of a roundiſh figure.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having four threads, of which two are longer than the others, and the ſeeds ſtanding naked in the cup. But he does not allow it to be a diſtinct: he genus calls it a kind of *origanum*.

The looſe compoſition of the general cup, and its drooping poſture on the plant, are ſufficient diſtinctions from *origanum*, and give it a right to retain its antient name.

Dittany of Crete.

Dictamnus Creticus.

This is a very ſingular and very elegant plant.

The root is compoſed of a great many long, ſlender, and tough fibres, connected to a ſmall head.

The ſtalk is ſquare, upright, of a purpliſh colour, and firm ſubſtance: it is a foot high, and it ſends out numerous branches.

The leaves ſtand in pairs, and at ſmall diſtances; and they are of a ſingular appearance: they are broad, ſhort, and ſomewhat rounded; but they have a point at the end; and they are of a greyiſh colour, and covered with a thick, woolly matter.

The flowers are ſmall and purple: they are collected into oblong, looſe heads, and theſe hang drooping at the extremities of all the branches.

The ſeeds are ſmall.

It is a native of the Greek iſlands and of ſome of the warmer parts of Europe. It flowers in July.

C. Bauhine calls it *Dictamnus Creticus*. Others, *Dictamnus Creticus acris*.

It is celebrated among the vulnerary plants by the antients; and many incredible ſtories are related of its effects.

It is in reality cordial and deobſtruent; and is good in all obſtructions of the viſcera.

GENUS XIII.

SWEET MARJORAM.

AMARACUS.

THE flower is formed of a ſingle petal, and is labiated. The tubular part is ſhort and compreſſed. The upper lip is undvided, rounded at the end, and placed erect: the lower lip is divided into three equal ſegments. The common cup is formed of ſcaly leaves, and is of a ſquare figure. The ſeeds are four after every flower; and they are roundiſh.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having four threads; of which two are longer than the others, and ſeeds remaining naked in the cup.

This author does not allow it to be a diſtinct genus; but makes it a ſpecies of *origanum*. The ſquare ſhape of the head or general cup is a ſufficient diſtinction of this plant from *origanum*, and gives it a right to retain its antient name.

Common Sweet Marjoram.

Amaracus vulgaris.

The root is compoſed of numerous, long, tough, brown fibres.

The ſtalk is ſquare, upright, branched, and a foot high: its colour is brown, and its ſubſtance brittle.

The leaves are placed in pairs at ſmall diſtances; and they are oblong, broad, obtuſe at the end, and of a light green.

The flowers are ſmall and white: they are placed in great numbers in oblong, ſquare heads at the tops of the ſtalk and branches.

It is a native of Spain, and other warmer parts of Europe, and flowers in July.

C. Bauhine calls it *Majorana vulgaris*. Others, *Amaracus hortenſis*.

It is common at our tables; and it has virtues as a medicine. It warms and ſtrengthens the ſtomach, and is good in vertigoes, giddineſs of the head, and other nervous complaints.

GENUS XIV.

BASIL.

OCYMUM.

THE flower is formed of a ſingle petal, and is labiated. The tubular part is ſhort, and ſpread very open. The upper lip is broad, and divided into four parts: the lower lip is narrow, undivided, and ſerrated, and is longer than the other. The cup is very ſmall, and it is divided like the flower into two lips. The flower is followed by four naked ſeeds, of an oval form.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having four threads, of which two are longer than the others, and the ſeeds ſtanding in the cup without a capſule.

1. Common Baſil.

Ocymum vulgare.

The root is long, divided, and furniſhed with numerous fibres.

The ſtalk is ſquare, upright, branched, and eight inches high.

The leaves are placed in pairs; and they have ſlender footſtalks: they are large, oblong, moderately broad, ſharply ſerrated, and pointed; and are of a fine green: they have a very fragrant and agreeable ſmell, but little taſte.

The flowers ſtand at the tops of the ſtalks and branches in long, looſe ſpikes: they are large, and of a whitiſh colour, with a faint daſh of purple.

The ſeeds are ſmall and oval.

It is a native of the Eaſt, but is common in our gardens.

C. Bauhine calls it *Ocymum vulgatius.* Others, *Ocymum citratum*, *Ocymum vulgare medium*, and *Ocymum nigrum.*

2. Great Baſil.

Ocymum majus.

The root is compoſed of numerous, thick whitiſh fibres.

The ſtalk is ſquare, firm, upright, and two feet high: it is of a purpliſh colour toward the bottom: and upwards it is of a pale green.

The leaves are large, and of a whitiſh green naturally; but often ſtained with purple: they are oblong, broad, and dented at the edges; and they have an extremely pleaſing ſmell.

The flowers are placed upon the tops of the branches in a ſhort, looſe ſpike: they are large and white.

The ſeeds are ſmall and brown.

It is a native of the Eaſt, and flowers in Auguſt.

C. Bauhine calls it *Ocymum caryophyllatum majus.* Others, *Ocymum magnum.*

This and the former have the ſame qualities; but this in the greateſt degree: they are uſed by the French and Italians in their cookery, and give a fine flavour to their diſhes; but in larger quantities they are uſeful againſt obſtructions of the viſcera. They promote the menſes, and they operate by urine. A ſyrup of the juice is good alſo in aſthmatick caſes.

3. Little Buſh-Baſil.

Ocymum minimum ramoſiſſimum.

The root is ſmall and long, and is ſurrounded with ſlender fibres.

The ſtalk is ſquare, ſix inches high, and divided into innumerable branches.

The leaves ſtand in pairs; and are ſmall, and of a roundiſh figure, but pointed: they are of a pale green, and ſometimes rediſh.

The flowers are ſmall and white, faintly tinged, ſometimes with purple, ſometimes entirely free from it: they grow from the boſoms of the leaves on the upper parts of the plant.

The ſeeds are ſmall and brown.

It is a native of Italy, and flowers in Auguſt.

C. Bauhine calls it *Ocymum minimum.*

Its virtues are the ſame with the others.

GENUS XV.

MOLUCCA BAUM.

MOLUCCA.

THE flower is formed of a ſingle petal, and is labiated. The tubular part is ſhort. The upper lip is undivided, hollow, and placed erect: the lower lip is divided into three ſegments; of which the middle one is the longeſt, and it is nipped at the end. The cup is formed of a ſingle piece, and opens into a wide mouth, (vaſtly larger than the flower) which is dented at the edge. The ſeeds are four after every flower: they are of an irregular figure; and they ſtand naked in the cup.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having two longer and two ſhorter threads, and the ſeeds having no capſule. He writes the name *molucella.*

1. Smooth

1. Smooth Molucca Baum.

Molucca lævis.

The root is compoſed of long, crooked fibres.

The ſtalk is upright, firm, two feet high, rediſh in the lower part, and ſomewhat ſquared; but not ſo exactly as in many of theſe plants.

The leaves ſtand in pairs; and they have long, ſlender footſtalks: they are large, broad, and ſhort, deeply indented, and of a dark green.

The flowers ſurround the joints of the upper part of the ſtalk; and they are ſmall and purpliſh. Their cups are moſt conſpicuous from their vaſt bigneſs; and they are of a yellowiſh colour.

The ſeeds are large, and irregularly ſhaped: four ſucceed every flower.

The whole plant has a very agreeable ſmell, ſomewhat reſembling that of *baum*.

It is a native of the warmer parts of the world, and flowers in July.

C. Bauhine calls it *Molucca lævis odorata*. Others, *Meliſſa moluccana odorata*, and *Molucca Syriaca lævis*.

2. Prickly Molucca Baum.

Molucca ſpinoſa.

The root is compoſed of numerous, long, ſlender, and tough fibres.

The ſtalk is ſquare, upright, two feet high, and branched.

The leaves are placed in pairs: they have long footſtalks, and they hang drooping: they are broad, ſhort, and deeply ſerrated: their colour is a faint green, and they have a very diſagreeable ſmell.

The flowers ſurround the ſtalks at the upper joints: they are ſmall and white; and they are ſometimes more or leſs ſtained with red, or ſometimes are red entirely. The cups are not ſo open or large as in the former kind; but they are edged with ſharp prickles.

It is a native of the Eaſt, and flowers in Auguſt.

C. Bauhine calls it *Meliſſa Moluccana fœtida*. Others, *Molucca ſpinoſa*.

The virtues are not known.

GENUS XVI.

BAUM.

MELISSA.

THE flower is formed of a ſingle petal, and is labiated. The tubular part is of a cylindrick form. The upper lip is ſhort, and of an arched figure: it is roundiſh, and placed erect, and is nipped at the extremity: the lower lip is divided into three ſegments; of which the middle one is largeſt; and it is of a heart-like ſhape. The cup is tubular, and divided like the flower into two lips. The ſeeds are four after every flower; and they ſtand naked in the cup.

Linnæus places this among the *didynamia gymnoſpermia*; the flower having two longer and two ſhorter threads, and the ſeeds ſtanding naked.

Common Baum.

Meliſſa.

The root is compoſed of innumerable long fibres, joined to an oblong head.

The ſtalks are ſquare, upright, ſlender, branched, and two feet high.

The leaves are placed in pairs; and they have ſlender footſtalks: they are broad, ſhort, and indented. Their colour is a freſh and pleaſant green: they have a light and ſoft hairyneſs; and they are of a very fragrant ſmell.

The flowers are ſmall and inconſiderable: they are white; and they ſtand in cluſters in the boſoms of the upper leaves.

The ſeeds are ſmall and brown.

It is a native of Germany, and flowers in Auguſt.

C. Bauhine calls it *Meliſſa hortenſis*. Others, *Meliſſa vulgaris*.

It is a cordial and ſudorifick; but it is more uſed by the country-people than in regular practice.

The END of the TWENTY-FIRST CLASS.

THE

THE BRITISH HERBAL.

CLASS XXII.

Plants whoſe flower is formed of a ſingle petal, divided into five parts at the edge; whoſe ſeeds ſtand naked, and are four in number after every flower; and whoſe leaves are placed alternately or irregularly, not in pairs, upon the ſtalks.

THIS is a claſs as naturally and as obviouſly diſtinguiſhed from all others, as any of the preceding. The plants which compoſe it wear a plain and perfect reſemblance of one another, and are unlike all others. This equally joins them under one head, and ſeparates all the reſt from them. Their place, in a natural arrangement of the genera, is marked by Nature; for they follow thoſe which have four ſeeds, in the ſame manner; but have their leaves in pairs, and have labiated flowers. Their characters, which ſeparate them from theſe, are incommunicable; while what they have in common with them is alſo throughout the whole ſeries unvaried.

So regular, ſo accurate is Nature in her diſtinctions. Mr. Ray, who ſtudied her in her own courſe, perceived it. He took in the diſpoſition of the leaves, as well as the ſtructure of the flowers, into his claſſical characters; and by that practice he kept theſe plants together, which others have ſcattered over their works.

Linnæus limits the claſſical characters of plants to the conſideration of the more minute parts of their flowers: therefore he muſt fail in caſes where the general external faſhion of the flower makes the diſtinction, much more where Nature has placed the great mark of diſtinction in the ſituation and diſpoſition of the leaves; which he never admits as a claſſical, nor indeed as a generical diſtinction, but only as a part of the deſcription of the ſpecies.

Ray calls theſe the aſperifoliate plants, guided by the roughneſs of the leaves of many of them: but that is an ill-choſen term. The name of a claſs muſt be equally applicable to every plant belonging to it; and how does this agree with hounds-tongue?

Borage and bugloſs have rough leaves; but there are others properly of this claſs, which have them altogether ſmooth.

Nature has connected theſe plants by a ſimilarity even in their ſmalleſt parts; and Linnæus, who does not allow them to conſtitute a diſtinct claſs, is obliged by his method, which regards only the threads in the flower, to keep moſt of them together.

They make a part of his fifth claſs, the *pentandria:* but ſome of them are ſeparated by his attachment to theſe leſſer parts; and with the reſt he has mixed in the ſame claſs plants ſo unlike in nature, that boys muſt laugh to ſee them brought together. The *coffee tree* and the *honeyſuckle*, *nightſhade* and *bucksthorn*, join with *borrage* and *bugloſs* to make the claſs of the *pentandria*.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this country.

GENUS I.

BUGLOSS COWSLIP.

PULMONARIA.

THE flower is formed of a ſingle petal: it is tubular at the bottom; and is of the length of the cup in this part. The rim is divided into five obtuſe ſegments. The cup is tubular, formed of a ſingle piece, ſtriated, and nipped in five places at the edge. The ſeeds are four after every flower; and they ſtand naked.

Linnæus places this among the *pentandria monogynia*; the filaments in the flower being five, and the ſtyle ſingle.

DIVISION I. BRITISH SPECIES.

Long-leaved Pulmonaria.

Pulmonaria longifolia.

The root is fibrous.

The firſt leaves are numerous, large, and beautiful: they are long, and moderately broad, ſharp-pointed, not at all indented at the edges, and of a deep green colour, handſomely variegated with ſpots of white.

The ſtalk is firm, upright, not much branched, and a foot and half high.

The leaves on this reſemble thoſe from the root; but they are ſmaller.

The flowers are very beautiful: they are placed in little tufts at the tops of the ſtalks and branches in the manner of *cowſlips*, which they reſemble alſo in their ſhape. Their colour is a fine bright red while in the bud; but they grow purpliſh and bluiſh, as they open.

The ſeeds are roundiſh.

It is found wild in ſome of our large woods, and for its beauty is brought thence into gardens.

C. Bauhine calls it *Pulmonaria anguſtifolia rubente cæruleo flore.* Others, *Pulmonaria foliis echii.* Our Engliſh gardeners call this and the following *bugloſs cowſlips*, and *ſage of Jeruſalem.* But theſe are bad names; and as our language affords no better, it is beſt to uſe the Latin.

DIVISION II. FOREIGN SPECIES.

Broad-leaved Pulmonaria.

Pulmonaria latifolia.

The root is compoſed of long and brown fibres.

The leaves are very numerous, and ſpread themſelves into a thick tuft: they are ſupported on footſtalks; and they are broad, ſhort, ſharp-pointed, not ſerrated at the edges, of a deep green colour, and very agreeably ſcattered over with white irregular ſpots.

The ſtalks are numerous, low, not branched, and of a pale green: they are eight or ten inches in height; and their leaves ſtand irregularly, and are broad and ſhort.

The flowers grow in tufts at the tops of the ſtalks, and reſemble *cowſlips* in form: they are of a delicate red when in the bud, but of a fine celeſtial blue when open.

The ſeeds are oblong and obtuſe.

It is a native of the woods of Germany, and flowers in April.

C. Bauhine calls it *Symphytum maculoſum, ſive Pulmonaria latifolia.* Others, *Pulmonaria maculoſa.*

It is good in obſtructions of the viſcera, and in the jaundice. The leaves and freſh tops boiled in ale are a familiar medicine among the peaſants of Germany in this diſorder, and very ſucceſsful.

GENUS II.

HOUNDS-TONGUE.

CYNOGLOSSUM.

THE flower is formed of a ſingle petal: it is tubular at the baſe, and divided into five obtuſe ſegments at the edge, and its opening is cloſed by five little ſcales. The cup is formed of a ſingle leaf, and is divided into five ſegments at the edge. The ſeeds are four after every flower: the

they ſtand naked in the cup; but they have a rough, looſe outer-ſkin, which ſome have called a capſule. The *meadow-rue*, and ſeveral other plants, give inſtances of ſeeds covered thus with a peculiar looſe ſkin. Theſe ſtand round the ſtyle.

Linnæus places this among the *pentandria monogynia*; the filaments in the flower being five, and the ſtyle ſingle.

DIVISION I. BRITISH SPECIES.

1. Common Hounds-Tongue.

Cynogloſſum vulgare.

The root is long and thick, black on the outſide, white within, and of a diſagreeable ſmell, but a ſweetiſh taſte.

The firſt leaves are numerous: they are very large, oblong, moderately broad, ſharp-pointed, not indented, deeply veined, and of a bluiſh green colour.

The ſtalk is firm, upright, and toward the top divided into ſeveral branches. Its colour is a whitiſh green; and it is two feet and a half high.

The leaves ſtand irregularly on it; and reſemble thoſe from the root, but they are ſmaller.

The flowers are very numerous, and of a deep blackiſh purple: they are placed in long ſeries on the upper parts of the ſtalks and branches; and they are of a diſagreeable ſmell.

The ſeeds are very conſpicuous: they are large, rough, and fixed round a pointed ſtyle.

It is common by road-ſides, and in dry paſtures; and flowers in June.

C. Bauhine calls it *Cynogloſſum majus vulgare.* Others only *Cynogloſſum.*

It is a plant of very conſiderable virtues. It is a balſamick and aſtringent; and is excellent againſt coughs cauſed by a thin, ſharp rheum. It is good againſt the *fluor albus*, and in overflowings of the menſes. A decoction of it drank largely is excellent againſt the bleeding of the piles; and the root, powdered, and taken half a dram for a doſe in ſharp looſeneſſes, attended with bloody ſtools.

2. Small green-leaved Hounds-Tongue.

Cynogloſſum minus ſolio virente.

The root is long and thick, black on the outſide, white within, and full of a ſlimy juice.

The firſt leaves are oblong, broad, and ſharp-pointed: they are of a bright green on the upper ſide, whitiſh underneath, and ſoft to the touch.

The ſtalk is firm, upright, not much branched, and two feet high.

The leaves are placed irregularly on it: they are oblong, narrow, and green on the upper ſide; but whitiſh, and ſomewhat rough underneath.

The flowers ſtand in the upper parts of the ſtalks; and are of a bluiſh purple, and ſmall.

The ſeeds are rough, and ſtand round a point.

We have it by way-ſides in many parts of England. It flowers in July.

C. Bauhine calls it *Cynogloſſum ſempervirens.* Others, *Cynogloſſa minor folio virente.*

DIVISION II. FOREIGN SPECIES.

Borage-flowered Hounds-Tongue.

Omphalodes.

The root is compoſed of innumerable fibres, connected to a long thick head.

The firſt leaves are numerous: they are placed on long footſtalks; and they are broad, ſhort, and of a fine ſtrong green: they are broadeſt at the baſe, and ſharp-pointed.

The ſtalks are numerous, very much branched, not upright, but irregularly diffuſed, and ten inches in length.

The leaves on theſe ſtand irregularly; and they are narrower, and more oblong than thoſe from the root.

The flowers are placed on ſlender footſtalks; and are large, and very beautiful. Their colour is a fine ſky blue; and they have a white croſs in the centre.

The ſeeds are ſmall, and covered with a rough ſkin.

It is a native of Spain and Portugal, and flowers in April.

Authors have been much perplexed to what genus to refer this little plant; and it is therefore deſcribed under a great variety of names.

C. Bauhine calls it *Symphytum minus boraginis facie.* Moriſon, *Borago minor repens verna folio lævi.* Others have called it *Omphalodes.*

GENUS III.

BUGLOSS.

BUGLOSSUM.

THE flower is formed of a ſingle petal: it is tubular at the baſe, and is deeply divided into five obtuſe ſegments at the edge; and its opening is covered up by five little, oblong ſcales. The cup is formed of one piece; and is tubular, and divided at the top into five ſegments. The ſeeds are four after every flower: they are oblong, obtuſe, and ſtand naked.

Linnæus places this among the *pentandria monogynia*; the threads in the flower being five, and the ſtyle ſingle. But he does not allow it to form a diſtinct genus: he makes the *bugloſſes* ſpecies of *alkanet*; but there is ſufficient diſtinction in the depth of the ſegments of the flower.

DIVI-

DIVISION I. BRITISH SPECIES.

1. Small Wild Bugloſs.

Bugloſſum ſylveſtre minus.

The root is long, ſlender, white, and furniſhed with numerous fibres.

The ſtalk is upright, ſlender, hairy, of a pale green, and divided irregularly into many branches.

The leaves are placed alternately; and they are oblong, moderately broad, and of a freſh green: they have no footſtalks: they are irregularly indented or waved on the edges; and they are hairy, and rough to the touch.

The flowers ſtand at the tops of the branches in conſiderable numbers; and they are ſmall and blue: they riſe from hairy cups.

The ſeeds are ſmall and oblong.

It is common in barren paſtures, and in corn-fields; and flowers in July.

C. Bauhine calls it *Bugloſſum ſylveſtre minus.* Others, *Bugloſſa minor.*

2. Evergreen Bugloſs.

Bugloſſum ſempervirens.

This is a very elegant plant. The common writers have from the breadth of its leaves taken it to be a ſpecies of *borage*; but it is properly of the *bugloſs* kind.

The root is long, thick, and white; and it is furniſhed with many fibres.

The firſt leaves are numerous, and very large: they are broad, ſharp-pointed, rough to the touch, and of a beautiful green.

The ſtalk is round, thick, hairy, and rough to the touch, of a freſh green, divided into numerous branches, and a yard high.

The flowers are very numerous: they ſtand all over the tops of the ſtalks and branches; and they are of a beautiful blue.

The ſeeds are dark coloured, and ſmall.

We have it wild in dry paſtures in Kent and Eſſex. It flowers in July.

C. Bauhine calls it *Bugloſſum latifolium ſempervirens.* Others, *Borago ſempervirens.*

3. Alkanet Bugloſs.

Bugloſſum arvenſe radice rubente.

The root is long, ſlender, and of a rediſh colour.

The ſtalk is round, upright, branched, and hairy: it is a foot and half high; and its colour is a pale green.

The leaves are placed irregularly on the ſtalks; and they are oblong and narrow, of a faint green, and hairy.

The flowers are ſmall and white: they ſtand in great numbers about the tops of the ſtalks.

The ſeeds are ſmall and brown.

It is common in corn-fields, and on ground that has been dug. It flowers in June.

C. Bauhine calls it *Lithoſpernum arvenſe radice rubra.* Others, *Bugloſſum anchuſæ facie.*

DIVISION II. FOREIGN SPECIES.

Garden-Bugloſs.

Bugloſſum ſativum vulgare.

The root is long and thick, black on the outſide, white within, and full of a ſlimy juice.

The firſt leaves are large, oblong, not very broad, and of a fine green colour, but covered with a grey hairyneſs, which makes them rough to the touch.

The ſtalk is round, upright, and toward the top divided into many branches: it is of a pale green, hairy, and a yard high.

The leaves are placed alternately on it; and they have no footſtalks: they are oblong, narrow, of a pale green, hairy, and rough to the touch.

The flowers grow in great numbers on the tops of all the branches; and they are ſmall, and of a purpliſh blue.

The ſeeds are large, and dark coloured.

It is a native of Germany, and flowers in Auguſt.

C. Bauhine calls it *Bugloſſum anguſtifolium majus.* Others, *Bugloſſum vulgare.*

The flowers are celebrated for their cordial virtue; but they are not much uſed.

GENUS IV.

VIPERS BUGLOSS.

ECHIUM.

THE flower is formed of a ſingle petal: it is tubular at the baſe, and thence gradually expands into a very wide mouth; and is divided into five unequal ſegments at the edge: two of theſe ſtand upwards, and are longer than the others; and one in the lower part is ſmaller than the others, and naturally turns back. The cup is formed of a ſingle piece, and divided into five ſegments. The ſeeds after each flower are four; and they are of a roundiſh figure, and pointed.

Linnæus places this among the *pentandria monogynia*; the ſtyle being ſingle, and the threads five.

DIVISION I. BRITISH SPECIES.

1. Common Viper's-Bugloſs.

Echium vulgare.

The root is long, thick, and furniſhed with a few fibres.

The firſt leaves lie upon the ground in a round cluſter: they are oblong, moderately broad, of a duſky green, and covered with rough hairs.

The ſtalk is round, upright, and a foot and half high: it is not much branched; and its ground-colour is a bright green; but it is uſually ſpotted very beautifully with red, and is very hairy.

The leaves are placed alternately on it; and they are oblong and narrow, of a pale green, hairy, and ſharp-pointed; and there uſually ſtand many young ones in their boſoms.

The flowers are large, numerous, and of a very fine blue, with more or leſs tinge of rediſh or purpliſh as they are more or leſs opened. The ſtyle in the middle is white, and the buttons on the threads in the flower are red.

Theſe flowers are placed in ſeveral ſeries along the tops of the ſtalks upon ſlender, bending, or curling branches.

The ſeeds are ſmall and brown.

It is common by way-ſides, and flowers in Auguſt.

C. Bauhine calls it *Echium vulgare*; a name copied by moſt others.

2. Wall-Bugloſs.

Echium murale.

The root is long, ſlender, and furniſhed with a few ſtraggling fibres.

The ſtalk is round, upright, a foot or more in height, and very much branched.

The leaves are placed alternately, and have no footſtalks: they are oblong, broad at the baſe, ſmaller all the way to the point, of a pale green, and hairy.

The flowers ſtand in conſiderable number at the extremities of the branches; and they are large, and of a beautiful blue.

The ſeeds are irregularly ſhaped and pointed.

It is a native of our ſea-coaſts; where it grows on the barren beach, on rocks, and from the walls made to keep in the ſea. It flowers in July.

C. Bauhine calls it *Lycopſis*; a name moſt others have followed. Some, *Echii altera ſpecies.*

3. Small-flowered Wall-Bugloſs.

Echium ramoſum flore parvo.

The root is long and ſlender.

The ſtalk is round, upright, hairy, divided into many branches, and of a pale green colour.

The leaves are placed irregularly on it; and they have all the rudiments of branches in their boſoms in the lower part, and long ſhoots in the upper.

The flowers ſtand at the extremities of the branches; and are ſmall, and of a purpliſh colour.

It is common about our ſouthern coaſts, and flowers in Auguſt.

Ray calls it *Echium alterum, ſive Lycopſis Anglica.*

4. Sea-Bugloſs.

Bugloſſum maritimum procumbens.

The root is long, ſlender, white, and hung with a few ſtraggling fibres.

The ſtalks are numerous, and they lie in great part upon the ground: they are round, of a pale green, and not much branched.

The leaves are placed alternately: they are oblong, broadeſt in the middle, ſharp-pointed, and joined to the ſtalk by a narrow baſe.

The flowers ſtand in conſiderable number at the tops of the branches; and ſome riſe alſo from the boſoms of the leaves: they are ſmall and blue.

The ſeeds are roundiſh, but pointed, and of a pale brown.

We have it about our ſouthern coaſts. It flowers in Auguſt.

Ray calls it *Echium marinum.*

The virtues of theſe plants are unknown.

DIVISION II. FOREIGN SPECIES.

African ſhrubby Echium.

Echium Africanum fruticoſum.

The root is woody and ſpreading.

The ſtem is firm, hard, woody, and divided into many branches.

The leaves are placed irregularly; and they are very numerous: they are oblong, narrow, and of a beautiful green.

The flowers ſtand at the tops of the branches; and they are large and beautiful: their general colour is a fine ſky-blue; but they are red at the bottom.

The ſeeds are large and brown.

It is a native of Africa, and flowers in July.

Van Royen and others call it *Echium caule fruticoſo.*

Long Leaved Pulmonaria

Broad Leaved Pulmonaria

Great Moundstongue

Small Green Leaved Moundstongue

Borage Moundstongue

Small wild Bugloss

Evergreen Bugloss

Alkanet Bugloss

Garden Bugloss

Vipers Bugloss

Wall Bugloss

African Moundstongue
Echium

Small Bugloss

German Madwort

Common Borage

Common Germanel

Creeping Germanel

Shrubby Germanel

GENUS V.

GERMAN MADWORT.

ASPERUGO.

THE flower is formed of a ſingle petal; and is tubular at the baſe, and expanded and divided into five obtuſe ſegments at the edge. The opening is covered up with five ſmall ſcales. The cup is formed of a ſingle leaf, and is divided into five ſegments; between each of which there are placed two little jaggs. The ſeeds are four; and they are oblong: they have no capſule, but are contained in this ſingular cup, which becomes very large, and cloſes upon them, ſo as to form two parallels, and ſhew five of the jaggs in a very peculiar and regular manner.

Linnæus places this among the *pentandria monogynia*; the threads in the flower being five, and the ſtyle ſingle.

It is a ſingular genus; of which there is but one known ſpecies; and that, though called German, is a native of Britain.

German Madwort.

Aſperugo.

The root is long, thick, and furniſhed with numerous fibres.

The ſtalks are long, but weak: they crawl upon the ground, if not ſupported, and run to the length of a yard or more: they are ſlender, rough, and divided into many branches.

The leaves are oblong, and conſiderably broad: they ſtand ſingly and alternately on the lower parts of the ſtalks; but toward the top two, three, or four often riſe together: they are hairy, and of a bright green.

The flowers are ſmall, and of a deep blue: they riſe from the boſoms of the leaves: theſe, from their ſmallneſs, are not conſpicuous; but when they are fallen, the cups cloſing over the ſeeds, ſwell out into a great bigneſs.

It is found on dry grounds in our weſtern counties not unfrequently; and in ſome other places. It flowers in July, and the ſeeds ripen in Auguſt.

C. Bauhine calls it *Bugloſſum ſylveſtre caulibus procumbentibus*. Others, *Aſperugo*.

It is ſaid to be good againſt diſorders of the nerves; but its virtues are not eſtabliſhed upon any good authority.

GENUS VI.

BORAGE.

BORAGO.

THE flower is formed of a ſingle petal: it is tubular at the baſe, and thence expands into a large breadth, and is deeply divided into five ſegments. The opening is edged with five ſmall protuberances, which are nipped at the ends. The cup is formed of a ſingle piece, and divided into five ſegments. The ſeeds are four after ever flower; and they are rough. They have no capſule; but the cup enlarges, and defends them.

Linnæus places this among the *pentandria monogynia*; the threads in the flower being five, and the ſtyle ſingle. He joins it with ſome other plants not allied properly to it.

Of the *borage*, diſtinctly ſo called, and thus defined, there is but one known ſpecies.

Common Borage.

Borago vulgaris.

The root is long, thick, divided, and furniſhed with many fibres.

The firſt leaves are oblong, broad, of a pale green, hairy, and very rough.

The ſtalk is thick, round, juicy, and of a pale green: it is hairy, and towards the top is divided into numerous branches.

The leaves ſtand irregularly on it; and have ſhort, fleſhy footſtalks: they are broad, and rough to the touch.

The flowers are very numerous, large, and of a celeſtial blue.

The ſeeds are oblong and pointed.

It is wild in our northern counties, and common every where in gardens. It flowers in June.

C. Bauhine calls *Bugloſſum latifolium ſive Borago*. Others, *Borago hortenſis*.

The flowers are celebrated for their cordial virtues: but they are not much uſed now in medicine.

GENUS VII.

GROMWELL.

LITHOSPERMUM.

THE flower is formed of a ſingle petal: it is tubular at the bottom, and divided into five obtuſe ſegments at the edge; and the hollow is open, not cloſed by ſcales, as in many of the other genera. The cup is formed of a ſingle piece, and is divided into five hollowed, pointed ſegments. The ſeeds are four after every flower: they are ſmooth and hard, and they ſtand naked in the cup.

Linnæus places this among the *pentandria monogynia*; the threads in the flower being five, and the ſtyle ſingle.

DIVISION I. BRITISH SPECIES.

1. Common Gromwell.

Lithoſpermum vulgare.

The root is long, thick, and furniſhed with a few fibres.

The ſtalk is round, firm, upright, and divided toward the top into numerous branches.

The leaves are placed alternately; and they have no footſtalks: they are oblong, rough, and of a duſky green.

The flowers ſtand in the boſoms of the leaves all the way up the tops of the branches; and they are ſmall and white.

The ſeeds are white, gloſſy, extremely hard, and naked.

It is common by road-ſides, and in dry paſtures. It flowers in July.

C. Bauhine calls it *Lithoſpermum majus erectum.* Others, *Lithoſpermum vulgare.*

The ſeeds of this plant are excellent againſt the gravel: they operate powerfully by urine.

2. Creeping Gromwell.

Lithoſpermum flore purpuraſcente.

The root is long, ſlender, and hung round with a few ſhort fibres.

The ſtalks are numerous and weak: they are hairy, and of a dark green colour in the lower part; where they lie upon the ground, and frequently ſend out ſmall fibres by way of roots.

The leaves are placed alternately; and they are oblong, narrow, and of a deep green.

The flowers ſtand at the tops of the branches; and they are large, and of a deep purple.

The ſeeds are rough and whitiſh.

We have it in barren grounds in the weſt of England, but not common. It flowers in Auguſt.

C. Bauhine calls it *Lithoſpermum minus repens latifolium.* Others, *Lithoſpermum majus Dodonæi.*

DIVISION II. FOREIGN SPECIES.

Shrubby Gromwell.

Lithoſpermum fruticoſum.

The root is long, thick, and furniſhed with a great many ſlender fibres.

The ſtalk is woody, firm, and divided into many branches.

The leaves are placed irregularly: in ſome parts they ſtand ſingly, and alternate, and in others they riſe three, four, or more together: they are oblong, hairy, and of a duſky green.

The flowers riſe from the boſom of the leaves; and they are ſmall.

The ſeeds are hard, ſmooth, and whitiſh.

It is a native of the Greek iſlands, and of many of the warmer parts of Europe. It flowers in June.

C. Bauhine calls it *Anchuſa anguſtifolia.* Others, *Anchuſa arborea.*

Its ſeeds are celebrated in the Eaſt in nephritick diſorders.

GENUS VIII.

MOUSE-EAR SCORPION-GRASS.

MYOSOTIS.

THE flower is formed of a ſingle petal: it is tubular at the bottom, and divided into five obtuſe ſegments at the rim. The opening is covered by five little ſcales. The cup is tubular, oblong, and divided into five ſegments at the edge. The ſeeds are four after every flower; and they ſtand naked in the cup, which grows larger to receive them. The leaves are oblong. The flowers grow in long, twiſted ſeries; and the ſeeds are gloſſy.

Linnæus places this among the *pentandria monogynia*; the threads in the flower being five, and the ſtyle ſingle.

1. Common Mouſe-Ear Scorpion-Graſs.

Myoſotis vulgaris hirſuta.

The root is long, ſlender, and hung about with many fibres.

The firſt leaves are oblong, moderately broad, obtuſe, and of a duſky green: they are hairy, and ſoft to the touch; and they ſpread themſelves upon the ground in a circular tuft.

The ſtalk is upright, hairy, of a pale green, and ten inches high.

The leaves on it ſtand alternately: they reſemble thoſe from the root; and they are in the ſame manner ſoft and hairy.

The flowers ſtand in long, ſlender ſpikes at the tops of the ſtalks and branches. The ends of theſe ſpikes of flowers twiſt round: ſo that they are ſuppoſed to repreſent the tail of a ſcorpion when curled up.

The flowers are ſmall and blue.

It is common on ditch-banks and in dry paſtures, and flowers in June.

C. Bauhine calls it *Echium ſcorpioides arvenſe.* Others, *Myoſotis ſcorpioides arvenſis hirſuta.*

It is ſaid to be an aſtringent; but its virtues are not certainly known.

2. Broad-leaved Mouſe-Ear Scorpion-Graſs.

Myoſotis ſcorpioides latifolia.

The root is compoſed of numerous, long, and ſlender fibres.

The ſtalk is hairy, ſlender, upright, and a foot or more in height: it is of a pale green, and not much branched.

The leaves are oblong, and moderately broad: they are hairy, ſoft, and of a pleaſant green: they are not at all indented at the edges.

The flowers ſtand in ſpikes at the tops of the branches; and they are large, and very beautiful. Their colour is a fine ſky-blue; and they have a yellow eye.

The ſeeds are ſmall and oblong.

It is common in damp woods in many parts of England, and flowers in May.

Ray calls it *Myoſotis ſcorpioides latifolia hirſuta.*

3. Water Mouſe-Ear Scorpion-Graſs.

Myoſotis ſcorpioides paluſtris.

The root is compoſed of numero s, long fibres.

The ſtalk is upright, thick, fleſhy, of a pale green, and divided into many branches: it riſes to about a foot high.

The leaves are oblong, and ſomewhat broad: they ſtand alternately, and they are of a freſh, pale green.

The flowers grow in long, curled ſeries at the tops of the ſtalks and branches; and they are of a moderate ſize, and of a bright blue.

The ſeeds are oval, pointed, and ſmooth.

It is common by pond-ſides, and flowers in June.

C. Bauhine calls it *Echium ſcorpioides paluſtre.* Others, *Myoſotis ſcorpioides paluſtris.*

4. Little yellow-flowered Mouſe-Ear Scorpion-Graſs.

Myoſotis ſcorpioides arvenſis minor.

The root is compoſed of ſlender fibres.

The ſtalk is weak, ſlender, upright, and ſix inches high, hairy, of a pale green, and divided into many branches.

The leaves ſtand alternately; and they are ſmall: they are oblong, hairy, and of a faint green.

The flowers ſtand at the tops of the ſtalks in twiſted ſpikes; and they are very ſmall and yellow.

The ſeeds are oval, minute, and ſmooth.

It is common on dry ditch-banks, and flowers in July.

C. Bauhine calls it *Echium ſcorpioides minus floſculis luteis.* Others, *Myoſotis ſcorpioides hirſuta minor.*

GENUS IX.

CAMFRY.

SYMPHYTUM.

THE flower is formed of a ſingle petal: it is tubular, and ſmall at the baſe; and it thence ſwells out into a wide, hollow form; and is divided into five obtuſe ſegments at the edge. The opening is cloſed by five ſmall ſcales, placed in the manner of rays, and converging to a point. The cup is formed of a ſingle piece: it is of a pentagonal figure, and is divided into five ſegments at the rim. The ſeeds are four after every flower; and they remain naked in the cup, which enlarges to defend them.

Linnæus places this among the *pentandria monogynia*; the threads in the flower being five, and the ſtyle ſingle.

Common Camfry.

Symphytum vulgare.

The root is long and thick, black on the outſide, white within, and full of a thick, ſlimy juice

The firſt leaves are very large: they are oblong, broadeſt in the middle, ſharp pointed, of a pale green, and rough to the touch.

The ſtalk is thick, angulated, of a pale green, branched, upright, and two feet high.

The leaves on it are placed irregularly: they are long, moderately broad, rough, and ſharp-pointed; but not indented at the edges.

The flowers ſtand in great numbers along the the tops of the ſtalks and branches, which turn round with them before they open: they are ſmall, and of a yellowiſh white; ſometimes they are purple.

The ſeeds are pointed at the end, and ſwelled on one ſide.

It is common in damp places, and flowers in July.

C. Bauhine calls it *Symphytum ſive conſolida major*. Others, *Symphytum majus*.

It is a plant of great virtues. It is cooling, agglutinant, and ſubaſtringent.

A conſerve of the roots cures the *fluor albus*. A decoction of the freſh root is excellent in coughs and ſoreneſs of the breaſt. The root, dried and powdered, is good againſt ſharp looſeneſſes, and thoſe attended with bloody ſtools.

GENUS X.

WATER-MILFOIL.

PENTAPTEROPHYLLON.

THE flower has no petals. The cup is formed of four leaves; and theſe are oblong, erect, and unequal: one is placed outermoſt, and is larger than the reſt; and one innermoſt, which is ſmaller. The ſeeds are four; and they ſtand naked. There are on this plant male and female flowers, diſtinct on the ſame ſtalk; but they differ in nothing except the inner parts. In the male flowers there are ſeveral threads with oblong antheræ; and in the female there are no threads or antheræ, but the rudiments of the four ſucceeding ſeeds: theſe have no ſtyles, but only a kind of downy ſtigmata. The leaves are finely divided; and they are placed many together at the joints ſurrounding the ſtalk.

Linnæus places this among the *monœcia polyandria*; the male and female flowers growing ſeparate upon the ſame plant, and the threads in the flower being numerous. He takes away the name *pentapterophyllon*, by which it is moſt commonly known, and calls it *myriophyllum*. This is a name that has been given by the old writers to many water-plants altogether different; and we have therefore retained the other.

The ſpecies of this genus are only two; and both are natives of Britain.

1. Small Water-Milfoil.

Pentapterophyllum minus.

The root is long, creeping, and hung with many fibres.

The ſtalk is round, upright, of a pale green, and a foot high.

The leaves are finely divided, or compoſed of very minute parts: ſeveral of them grow together at each joint; and they reſemble feathers, being formed of extremely ſlender, oblong ſegments, united at their baſe to a middle rib.

The flowers are ſmall, and inconſiderable: they grow in the boſoms of the leaves from the middle to the top of the plant; and they are of a greeniſh white.

The ſeeds are oblong and ſmall.

It is common in ſhallow rivers in many parts of England, and flowers in Auguſt.

C. Bauhine calls it *Milleſolium aquaticum floſculis ad foliorum nodos.*

2. Spiked Water-Milfoil.

Pentapterophyllon ſpicatum.

The root is ſmall and fibrous.

The ſtalks are ſlender, and of a browniſh green, a foot or two in length, and divided into branches.

The leaves are numerous, and finely divided.

The flowers ſtand in part in the boſoms of the leaves, and in part in jointed ſpikes at the tops of the branches: theſe on the ſpikes are the male flowers, and thoſe in the boſoms of the leaves the female; and theſe latter are followed each by four naked, oblong ſeeds.

It is found in brooks and rivers, and flowers in July.

C. Bauhine calls it *Millifolium aquaticum pennatum ſpicatum.* Others, *Myriophyllum aquaticum ſpicatum.*

The virtues of theſe plants are unknown.

SERIES

SERIES II.

FOREIGN GENERA.

Thoſe of which there is no ſpecies naturally wild in this country.

GENUS I.

ALKANET.

ANCHUSA.

THE flower is formed of a ſingle petal: it is tubular at the baſe, and ſlightly divided at the edge into five rounded ſegments; and the hollow part is open, not cloſed, by ſcales, as in ſome other genera. The cup is formed of a ſingle piece: it is tubular, and is divided into five narrow parts at the rim. The ſeeds are four in number after every flower; and they are oblong, pointed, ſmooth and hard.

Linnæus places this among the *pentandria monogynia*; the threads in the flower being five, and the ſtyle ſingle.

He makes a ſtrange confuſion in the ſcience in this article; for he takes away from this plant the name of *alkanet*, *anchuſa*, which he uſes as the generical term for *bugloſs*; and he places this among the *gromwells*, making it a ſpecies of that genus.

The diſtinctions are ſufficient in Nature; and the plant may much more properly retain its received and antient name.

Scarlet Alkanet.

Anchuſa floribus rubentibus.

The root is long, thick, and of a fine glowing red colour.

The firſt leaves are numerous, and ſpread themſelves in a round tuft: they are oblong, narrow, rough, of a duſky green, and not at all indented at the edges.

The ſtalks are numerous, round, hairy, divided into branches, and a foot high.

The leaves are placed alternately on them; and they are oblong, narrow, of a deep green, and hairy.

The flowers are numerous, and very beautiful: they ſtand in long ſeries at the tops of all the branches; and they are large, and of a glowing ſcarlet colour.

The ſeeds are ſmall and hard.

It is a native of the Eaſt, but is found alſo in ſeveral of the warmer parts of Europe. It flowers in Auguſt.

C. Bauhine calls it *Anchuſa puniceis floribus*. Others, *Anchuſa vulgaris*, and *Anchuſa officinarum*.

The root is aſtringent, but is not much uſed as a medicine. It gives ſcarlet tinge to oil, and is therefore employed for various purpoſes where a fine colour is required, without any great virtues.

GENUS II.

TURNSOLE.

HELIOTROPIUM.

THE flower is compoſed of a ſingle petal: it is tubular at the bottom, divided into five irregular ſegments at the rim, and has the opening covered with five little ſcaly appendages, which converge together ſo as to form a kind of ſtar. The cup is formed of a ſingle piece: it is tubular, divided at the edge into five ſegments, and remains when the flower is fallen. The ſeeds are four, and of an oval figure: they ſtand naked in the cup, which remains unaltered.

Linnæus places this among the *pentandria monogynia*; the threads in the flower being five, and the ſtyle ſingle.

1. Great Turnſole.

Heliotropium majus.

The root is long, thick, and hard.

The ſtalk is upright, divided into branches, and about eight inches high: it is hairy, hollow, and of a pale green.

The leaves are placed irregularly, and have long footſtalks: they are oblong, broad, obtuſe, not indented, and of a pale green colour.

The flowers ſtand at the tops of all the branches in long, ſlender ſpikes, intermixed with little, woolly leaves: they are ſmall and white; and theſe ſpikes turn back at the ends, twiſting like our mouſe-ear ſcorpion graſs.

The ſeeds are grey, hard, and ſmooth.

It is a native of the warmer parts of Europe, and flowers in June.

C Bauhine calls it *Heliotropium majus Dioſcoridis*. Others, *Heliotropium majus*, and *Heliotropium vulgare*.

An infuſion of the plant given in large quantities operates by urine, and is good againſt the gravel. The juice applied outwardly takes away warts.

2. Procumbent Turnſole.

Heliotropium ſupinum minus.

The root is long, ſlender; and blackiſh.

The ſtalks are numerous and weak: they ſpread themſelves every way upon the ground; and they are ſix or eight inches long, and divided into many branches.

The leaves are placed alternately on ſhort footſtalks; and they are ſmall, broad, obtuſe, ſhort, of a beautiful green, and a little hairy.

The flowers are ſmall and white; and they are placed, as in the others, in long curled ſpikes.

It is common in the ſouth of France, and flowers in June.

C. Bauhine calls it *Heliotropium minum ſupinum*. Others, *Heliotropium ſupinum Cluſii*.

GENUS III.

HONEYWORT.

CERINTHE.

THE flower is formed of a ſingle petal. The lower part is ſmall and tubular: the upper part is alſo hollowed, but larger, and at the rim is divided lightly into five ſegments. Its hollow is open: there are none of thoſe little ſcales, which cloſe it in many other genera. The cup is formed of a ſingle piece; but it is deeply divided into five ſegments equal in ſize, and pointed. The ſeeds are four after every flower; and they are encloſed in two looſe ſkins, which are rough and hard.

Linnæus places this among the *pentandria monogynia*; the filaments in the flower being five, and the ſtyle ſingle.

Great Honeywort.

Cerinthe major.

The root is long, thick, and white.

The ſtalks are numerous, round, fleſhy, and a foot and half high: they are of a pale and ſomewhat bluiſh green.

The leaves are placed alternately at ſmall diſtances; and they uſually hang drooping: they are large and broad. Their colour is a bluiſh green, and they are ſpotted with white: they are broadeſt at the baſe, and obtuſe at the end.

The flowers are large; and they are placed in conſiderable numbers upon ſlender branches riſing from the boſoms of the leaves: they are yellow in the upper part, and purple at the baſe. The tops of the branches that bear them naturally turn down ſpirally, as in the mouſe-ear ſcorpion-graſs.

It is a native of the ſouthern parts of Europe, and flowers in July.

C. Bauhine calls it *Cerinthe flore flavo aſperior*.

This is the plant celebrated by the old Romans as the favourite of the bees. The flower contains a great deal of honey-juice.

GENUS IV.

TOURNEFORTIA.

THE flower is formed of a ſingle petal. The lower lip is tubular, and of an oval figure; and it thence ſpreads into a broad rim, which is cut lightly into five broad, but pointed ſegments. The cup is formed alſo of a ſingle piece, divided deeply into five ſegments. The ſeeds are four; and they are ſurrounded with a ſkin, and ſeparated by a pulpy ſubſtance.

Linnæus places this among the *pentandria monogynia*; the filaments in the flower being five, and the ſtyle ſingle.

Nature wantons in the characters of this plant: its fruit approaches to the nature of a berry; while all the other parts, and in this the number of ſeeds, correſpond with the reſt.

Oval-leaved Tournefortia.

Tournefortia foliis ovatis integris.

The root is long, divided, and furniſhed with many fibres.

The ſtalk is woody, and yet weak; but it will climb to a great length, when there are trees or buſhes to ſupport it: it is of a pale green, and ſmooth.

The leaves are placed alternately; and they are large, oblong, of an oval form, ſharp-pointed, not at all dented at the edges; of a beautiful deep green on the upper ſide, and of a blue green underneath.

The flowers ſtand in long ſeries on the tops of the ſtalks and branches, which divide for that purpoſe into numerous twigs: they run only on one ſide of theſe; and they are ſmall and yellow.

It is frequent in the woods of South America, and flowers in July.

Plukenet calls it *Virga aurea Americana fruteſcens glabra foliis ſubtus cæſiis*. But this was a very improper generical name. Plumier called the genus *Pittonia*, and Linnæus *Tournefortia*, both after the name of the author of the *Inſtitutiones rei herbariæ*.

The END of the TWENTY-SECOND CLASS.

THE

THE

BRITISH HERBAL.

CLASS XXIII.

Plants whoſe flower is formed of a ſingle petal, divided deeply into four ſegments, and ſucceeded by two ſeeds; and whoſe leaves are placed ſeveral together at every joint, and expanded like the rays of a ſtar.

THIS is a claſs diſtinguiſhed with great certainty by Nature, and by very obvious characters. Mr. Ray has followed, as uſual, her ſteps, and kept the plants diſtinct from all others, in a peculiar claſs, under the name of *herbæ ſtellatæ*, the ſtellate plants: but they are blended among many others by the modern writers; they not admitting the diſpoſition of leaves, however ſingular, into the number of claſſical, or even generical diſtinctions.

The conſequences of each method are obvious. In Mr. Ray theſe plants are kept together, and no others are mixed among them, or joined to them: in Linnæus, and his followers, they are ſeparated into various claſſes, and in each joined with plants the moſt unlike that ſtudious error could have choſen: *cleavers* is ranked with *ſcabious* among the *tetrandria*; and *croſſwort* is put ten claſſes off, with *pellitory of the wall* and *orach*.

This confirms, like the reſt, the impropriety of that method.

SERIES I.

Natives of BRITAIN.

Thoſe of which there is one or more ſpecies naturally wild in this kingdom.

GENUS I.

CROSSWORT.

CRUCIATA.

THE flowers are of two kinds, male and hermaphrodite upon the ſame plant. The hermaphrodite flower ſtands ſingle on its ſtalk: it is formed of one petal, and is divided at the top into four oval and ſharp-pointed ſegments. There is ſcarce any cup to this, but in its place a rudiment of the fruit, which afterwards ripens into a pair of ſeeds, covered with a tough ſkin, and ſo cloſely joined, that they ſeem but one. The male flowers are placed upon the rudiment of the other on each ſide; and each is formed of a ſingle petal, divided uncertainly into three or four ſegments, which are oval and acute. This has a rudiment of a fruit underneath it, as the other; but it never ripens.

Linnæus places this among the *polygamia monœcia*; the ſeveral flowers, though diſtinct in ſex, yet growing on the ſame plant, and the impregnation of the ſeeds being by male and hermaphrodite ones.

Croſſwort.

Cruciata vulgaris.

The root is fibrous.

The ſtalks are numerous, upright, ſquare, and not much branched: they are rough on the ſurface, and weak.

The leaves are placed in an elegant manner, four at a joint, at conſiderable diſtances; and they are oblong, broad, of a bright, but ſomewhat yellowiſh green, and hairy.

The flowers are ſmall and yellow; and they grow in cluſters from the boſoms of the upper leaves.

It is not uncommon in dry paſtures. A grea deal of it ſpreads over the grave of Mr. Doody in the church-yard of Hampſtead; perhaps originally planted there to perpetuate the little ſpot that holds the remains of that diligent and careful botaniſt.

C. Bauhine calls it *Cruciata birſuta.* Others only *Cruciata.*

It is an aſtringent. The tops, dried and powdered, are good againſt the overflowings of the menſes, and in the *fluor albus.*

GENUS II.

MADDER.

RUBIA.

THE flower is formed of a ſingle petal, hollow at the baſe, and deeply divided into four ſegments. The cup is very ſmall: it is formed of a ſingle piece, divided into four parts; and is placed upon the rudiment of the fruit. The ſeeds are two after every flower: they are covered with a pulpy matter, and ſurrounded with a ſkin; ſo that they reſemble two berries ſtuck cloſe together.

Linnæus places this among the *tetrandria monogynia*; the threads in the flower being four, and the ſtyle ſingle.

Madder.

Rubia ſylveſtris aſpera.

The root is compoſed of numerous, long, and thick parts, which run under the ſurface, and ſpread to a great diſtance: it is of a red colour, and conſiſts of a hard ſubſtance on the centre, with a tender juicy covering.

The ſtalks are numerous, ſquare, not very firm, branched, and a foot and half high: they are of a pale green, and are very rough to the touch, and will ſtick to any thing, like the ſtalks of cleavers.

The leaves are placed with great regularity at the joints, five or ſix at each; and they ſpread out in the manner of rays.

The flowers are very numerous, and grow in cluſters at the tops of the branches; and they are of a faint yellowiſh green.

The fruit is large, and dark coloured.

We have it in plenty in our weſtern counties. It flowers in July.

C. Bauhine calls it *Rubia ſylveſtris aſpera que Dioſcoridis.* Others, *Rubia tinctorum.*

Mr. Ray has joined the common writers in ſeparating as diſtinct ſpecies *madder* thus in its wild ſtate, and ſuch as is cultivated; but there is no other difference between them, than that the cultivated kind is large becauſe better nouriſhed.

It is of vaſt uſe in dying, and is alſo employed in medicine. It is good againſt obſtructions of the viſcera, and in habitual purgings.

GENUS III.

LITTLE MADDER.

RUBEOLA.

THE flower is formed of a ſingle petal; and is tubular at the baſe, and divided at the edge into four parts. The cup is very ſmall, and is placed upon the rudiment of the fruit: it is formed alſo of a ſingle piece, and divided into four ſegments. The ſeeds are two after every flower; and they are connected lengthways into an oblong fruit, crowned at the top: when ſeparated, each is flat on one ſide, rounded on the other, and ſharp-pointed.

Linnæus places this among the *tetrandria monogynia*; the threads in the flower being four, and the ſtyle ſingle. He takes away the received name *rubeola*, and calls the genus *ſherardia.*

Little Field-Madder.

Rubeola arvenſis cærulea.

The root is long and ſlender, and is hung about with many fibres.

The ſtalks are numerous and weak, and for the moſt part procumbent: they are ſquare, hairy, and ſeldom branched.

The leaves ſtand ſeveral together in a regular manner, diſpoſed like rays, ſix or eight at a joint: they are oblong, pointed, and of a fine green.

The flowers are ſmall and blue.

The ſeeds are oblong and large.

It is common in plowed lands, and flowers in July.

C. Bauhine calls it *Rubeola repens arvenſis cærulea.*

Its virtues are not certainly known.

Common Hogweed
Serpion grass

Broad leaved
Serpion grass

Water
Serpion grass

Common Cowslip

Small Water
Violet

Scarlet Ukanet

Great Sumach

Procumbent Sumach

Great Honey wort

Oval leaved
Sowthistle

Cicely Weed

Meadow

Little Field
Marigold

White Ladys
Bedstraw

Yellow Ladys
Bedstraw

Weld weed

Blue Centaury

Common Chervil

Little Wall
Chervil

GENUS IV.

LADY'S BEDSTRAW.

GALLIUM.

THE flower is formed of a ſingle petal, and is divided almoſt to the baſe into four ſegments. The cup is very ſmall: it is formed of one piece, and divided into four parts; and it ſtands upon the rudiment of the fruit. The ſeeds are two: they are joined together, and have a looſe covering.

Linnæus places this among the *tetrandria monogynia*; the threads in the flower being four, and the ſtyle ſingle.

1. White Lady's Bedſtraw.

Gallium album.

The root is compoſed of numerous, long, and tough fibres.

The ſtalk is ſquare, weak, and of a pale green: it is not able to ſupport itſelf; but it uſually grows within the reach of buſhes. It is very much branched, and two feet high.

The leaves ſtand in a ſtellate manner at the joints of the ſtalk, ſix or eight at each joint; and they are ſhort, narrow, and of a deep, blackiſh green.

The flowers are ſmall and white: they grow in great numbers on the tops of the branches, and cover them with a ſnowy whiteneſs.

The ſeeds are ſmall.

It is common in damp places among buſhes, and flowers in June.

C. Bauhine calls it *Gallium album latifolium.*

2. Four-leaved white Lady's Bedſtraw.

Gallium album quadrifolium.

The roots are fibrous.

The ſtalk is ſquare, weak, very much branched, and a foot and half long; but, if not ſupported, it uſually ſtraggles upon the ground.

The leaves are placed at the joints in a radiated manner, but there are only four at each joint: they are broad, ſhort, and of a deep green: thoſe on the lower parts of the ſtalks are ſmooth; but toward the top they are rough.

The flowers are ſmall and white; but they are very numerous, covering the tops of the ſtalk and branches.

The ſeeds are large, and joined two together.

It is common in wet places, and flowers in Auguſt.

C. Bauhine calls it *Gallium paluſtre album.*

Some give this the Engliſh name of *White Lady's Bedſtraw*; but it properly belongs to the preceding ſpecies.

3. Croſſwort Lady's Bedſtraw.

Gallium erectum quadrifolium leve.

The root is long, ſlender, divided, and hung about with a few ſtraggling fibres.

The ſtalk is ſquare, upright, rediſh, very little branched, and a foot high.

The leaves are placed in a ſtellated manner at the joints, and there are only four at each joint: they are oblong, and not at all indented; and their colour is a delicate green.

The flowers are ſmall and white, and they ſtand in cluſters on the tops of the ſtalks and branches.

It is a native of our northern counties, and flowers in Auguſt.

Ray calls it *Mollugo montana erecta quadrifolia.* J. Bauhine, *Rubia erecta quadrifolia.*

4. Dwarf white Lady's Bedſtraw.

Gallium album minimum.

The root is long and ſlender, and has a few ſtraggling fibres.

The ſtalks are numerous, and about three inches long: they are ſquare, ſmooth, of a pale green, and not well able to ſupport themſelves upright.

The leaves ſtand in a ſtellate manner at diſtances on the ſtalks; and they are ſmooth, and of a pale green.

The flowers are very ſmall and white; and they ſtand in great abundance on the tops of the ſtalks and branches.

It is common on hilly ground, eſpecially where there is ſome wet. It flowers in July.

C. Bauhine calls it *Gallium album minus.* Others, *Mollugo montana minor.*

Authors have diſtinguiſhed a variety of this plant under the name of *Gallium album minimum multicaule*; but it is not a diſtinct ſpecies: it is only this kind growing on a drier ſoil.

5. Yellow Lady's Bedſtraw.

Gallium luteum.

The root is long, hard, divided, and furniſhed with a few ſtraggling fibres.

The ſtalks are firm, hard, upright, not much branched, and two feet or more in height; and they are of a yellowiſh green colour.

The leaves grow in a ſtellate manner at the joints of the ſtalks, a conſiderable number together: they are oblong, narrow, and of a blackiſh green.

The flowers are ſmall; but they are extremely numerous: they cover the tops of the ſtalks with a fine gold yellow.

The ſeeds are ſmall and brown.

It is common in dry paſtures, and under hedges. It flowers in July.

C. Bauhine calls it *Gallium luteum*; a name almoſt all other writers have copied.

The flowers of this plant contain a latent acid: they will curdle milk. The country-people know this, and call the plant *cheeſe-renning*. In medicine it is ſaid to be attenuating and deobſtruent; but its virtues are not eſtabliſhed on any good authority.

GENUS V.

WOODRUFFE.

ASPERULA.

THE flower is formed of a ſingle petal. The lower part is faſhioned into a ſomewhat long tube; and the edge is ſpread out, and divided into four narrow ſegments; which are oblong, pointed, and turned backwards. The cup is ſmall, and divided into four parts at the rim; and it ſtands upon the rudiment of the fruit. The ſeeds are two after every flower; and they are covered with a looſe ſkin, and grow together.

Linnæus places this among the *tetrandria monogynia*; the threads in the flower being four, and the ſtyle ſingle.

DIVISION I. BRITISH SPECIES.

Woodruffe.

Aperula vulgaris.

The root is fibrous, and ſpreading.

The ſtalk is ſquare, upright, not much branched, and eight inches high: it is of a pale green, and of a tender ſubſtance.

The leaves are placed at the joints in a ſtellated manner, a conſiderable number together; and they are long, narrow, ſharp-pointed, ſmooth, and of a dark green.

The flowers are ſmall, white, and of a very fragrant ſmell: they grow in tufts, almoſt in the manner of umbells, on the tops of the ſtalks.

The ſeeds are large and round.

It is common in our woods, and flowers in May.

C. Bauhine calls it *Aſperula ſeu rubeola montana odora.* Others, *Aſperula odorata.*

It is good againſt obſtructions of the viſcera; but it is not in uſe.

DIVISION II. FOREIGN SPECIES.

Blue Woodruffe.

Aſperula cærulea.

The root is compoſed of numerous fibres.

The ſtalk is ſquare, upright, and a foot and half high: it is of a pale green, and not much branched.

The leaves are placed in the ſtellate manner at the joints ſeveral together: they are long, narrow, and of a pale green; and they are a little hairy.

The flowers are ſmall and blue: they ſtand in a little tuft at the top of the ſtalk; and they are ſurrounded by a ſeries of leaves which riſe above them, and in a manner hide them.

The ſeeds are large and brown.

It is common in the corn-fields of Italy, and flowers in July.

C. Bauhine calls it *Aſperula cærulea arvenſis.* Others, *Aſperula cærulea.*

Its virtues are the ſame with thoſe of the former.

GENUS VI.

CLEAVERS.

APARINE.

THE flower is formed of a ſingle petal; and is divided almoſt to the baſe into four ſegments. The cup is very ſmall: it is formed alſo of a ſingle piece, divided into four parts; and it ſtands on the rudiment of the fruit. The ſeeds are large and roundiſh, with a dent in the middle; and they are covered ſeparately with a looſe, rough ſkin, and grow together.

Linnæus places this among the *pentandria monogynia*; the threads in the flower being five, and the ſtyle ſingle.

In his *Genera Plantarum* he makes it a diſtinct genus; but in his ſpecies, ſince abolished, he joins it with the *gallium*, taking away its old generical name: but this is wrong, for the plant is ſufficiently diſtinct by the form of the ſeeds; and the old name is better preſerved.

1. Common Cleavers.

Aparine vulgaris.

The root is ſlender, and creeping.

The ſtalks are numerous, ſquare, of a pale whitiſh green, and two feet or more in length: they uſually riſe among buſhes; and they ſtick to every thing they touch, otherwiſe they would not be able to ſupport themſelves upright. They are not much branched: they are covered with rough, hooked hairs.

The leaves are long, narrow, and of a pale green: there grow about ſix of them at every joint, diſpoſed like the rays of a ſtar.

The flowers are ſmall and white: the ſeeds are round, double, and included in rough, looſe ſkins.

It

☞ It is common every where under hedges, and flowers in June.

C. Bauhine calls it *Aparine vulgaris*; a name copied by others.

☞ It is a plant of conſiderable virtues. The juice is taken in the ſpring againſt ſcorbutick complaints with ſucceſs. It alſo operates by urine, and is good againſt the gravel. The root and tops given in a ſtrong infuſion are alſo good againſt obſtructions of the viſcera.

2. Little Wall-Cleavers.
Aparine minima muralis.

The root is oblong, ſlender, and furniſhed with a few fibres.

The ſtalks are numerous, ſquare, and tolerably upright: they are eight inches high, and are not much branched.

The leaves are placed in a ſtellate manner round the ſtalks, about ſix at a joint; and they are ſhort and pointed, of a pale green, and rough to the touch.

The flowers grow on ſlender, branched footſtalks, riſing from the boſoms of the leaves: they are ſmall, and of a greeniſh white.

The ſeeds are roundiſh and double; and they are not ſo rough as in the other kind.

It is found on walls and ditch-banks, and flowers in May.

Ray calls it *Aparine minima.*

3. Smoother-ſeeded Cleavers.
Aparine ſemine lævore.

The root is compoſed of ſlender fibres.

The ſtalks are ſquare, numerous, and a foot high: they are not much branched; and their colour is a pale green.

The leaves are oblong, narrow, blunt at the end, and of a duſky green: they ſtand like rays round the joints of the ſtalks, five or ſix together.

The flowers are larger than in the common kind, and of a pure white.

The ſeeds are double, and encloſed in a looſe ſkin. This is not ſo rough as in the common kind, but has only a few ſhort hairs upon it.

We have it common in corn-fields. It flowers in June.

Ray calls it *Aparine ſemine lævore.*

4. Short-leaved Marſh-Cleavers.
Aparine paluſtris foliis brevioribus.

The root is oblong, ſlender, and rediſh.

The ſtalk is ſquare, rough, of a pale green, weak, and about a foot high.

The leaves ſtand in rays at the joints of the ſtalks; and they are ſhort, ſharp-pointed, and of a bright green.

The flowers ſtand on footſtalks riſing from the boſoms of the leaves; and they are white and ſmall.

The ſeeds are double, and are encloſed in a rough ſkin.

It is common on bogs, and in damp places under hedges. It flowers in April.

Ray calls it *Aparine paluſtris minor Pariſienſis flore albo.*

The virtues are the ſame with thoſe of the *common cleavers.*

GENUS VII.

SQUINANCYWORT.

RUBIA CYNANCHICA.

THE flower conſiſts of a ſingle petal. The lower part is in form of a long tube: the rim is ſpread out, and divided into four pointed ſegments. The cup is ſmall, and divided into four parts; and it ſtands on the rudiment of the fruit. The ſeeds are two after every flower; and they are very large, round, and encloſed in a looſe ſkin: they grow joined together. The leaves are three-cornered.

Linnæus places this among the *tetrandria monogynia*; the threads in the flower being four, and the ſtyle ſingle. But he does not allow it to be a diſtinct genus. He joins it with the *aſperula* or *woodruffe*, from which it differs in the three cornered ſhape of the leaves.

There is but one known ſpecies of this plant, and that is a native of Britain.

Squinancywort.
Rubia cynanchica.

The root is long, ſlender, and furniſhed with a few fibres.

The ſtalks are numerous, ſquare, rediſh, not much branched, and about ten inches high.

The leaves ſtand in the manner of rays at the joints of the ſtalks, ſix at a joint in the lower part of the plant, and four at a joint in the upper: they are ſmall, oblong, ſlender, and three-cornered, and ſharp-pointed.

The flowers are ſmall and red; but they are numerous, and make a pretty appearance: they are diſpoſed in a kind of umbel at the tops of the ſtalks.

It is not uncommon on hilly, barren grounds. It flowers in July.

C. Bauhine calls it *Rubia cynanchica.* Others, *Rubeola quadrifolia lævis.*

It is ſaid to be a ſovereign remedy for the quincy; but there is no good authority for the practice.

The END of the TWENTY-THIRD CLASS.

THE

THE

BRITISH HERBAL.

CLASS XXIV.

Plants whoſe flowers are placed in umbells, or rounded cluſters; and are compoſed each of five petals, and ſucceeded by two ſeeds, which ſtand naked, and united, and are crowned with the cup.

THESE are diſtinguiſhed as obviouſly as the preceding by Nature, and can never be ſeparated from one another; nor can any other plants be joined with them in a juſt method.

The umbel is a tuft compoſed of numerous flowers, placed on divided, and often ſubdivided footſtalks; all of which are encloſed at the baſe by a leafy cup, beſide the ſmall one that belongs to the flower. This plainly and obviouſly diſtinguiſhes them. And what Nature has thus thrown before the moſt ſlight obſerver, ſhe has ſupported and confirmed for the ſtricteſt obſervation; for all thoſe plants, which have the flowers thus thrown into umbells, have each flower thus compoſed of five petals, and followed by two joined and naked ſeeds.

This has led Mr. Ray to claſs them under the name of *herbæ umbelliferæ*; and moſt others have in the ſame manner kept them together, and ſeparated them from all others: but the modern ſyſtems, always at war with Nature, ſet aſide this diſtinction; they regard only the number of threads in the flower: therefore the obvious and certain mark of the umbel cannot have any force.

Nature is ſo uniform, even in the leaſt things, that this method keeps moſt of the umbelliferous plants together, for they agree alſo in the number of threads and petals; but it does not ſeparate them from other plants.

Linnæus, who keeps moſt of the umbelliferous plants together in his claſs of *pentandria*, yet joins with them the *elm* and *gentian*.

The two purpoſes to be anſwered by arranging plants in claſſes, are, to keep thoſe which are alike together, and to ſeparate them from others. The regularity of Nature does not admit of varying from the firſt point; but theſe authors wholly loſe ſight of the latter. The *elm* and *hemlock* in Linnæus ſtand in the ſame claſs and the ſame ſection: they are not ſeparated by any ſubordinate diviſion.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this kingdom.

GENUS I.

COW-PARSNEP.

SPHONDYLIUM.

THE flowers are diſpoſed in very large umbells, ſurrounded at the baſe with numerous, oblong leaves. Each is compoſed of five petals, in ſome regular, in others irregular; the outer ones being larger than the others, and all of them nipped at the end, and heart-faſhioned. The cup is very ſmall; and the ſeeds are broad, ſhort, and foliaceous.

Linnæus

Linnæus places this among the *pentandria digynia*; the threads in each flower being five, and the ſtyles two.

This author joins the *ſphondylium* and *panas Heracleum* in one genus; and, taking away the name *ſphondylium*, calls it *Heraclea*. But there is ſufficient diſtinction between theſe two genera; and the antient name may very well be retained.

DIVISION I. BRITISH SPECIES.

1. Cow-Parſnep.

Sphondylium vulgare.

The root is long, thick, and white, and of a ſweetiſh, but ſomewhat acrid taſte.

The firſt leaves are very large, deeply divided in the pinnated manner, of a rough ſurface, and of a pale green.

The ſtalk is ſix feet high, upright, firm, ſtriated, and of a pale green, often purpliſh toward the bottom.

The flowers ſtand at the top of the ſtalk and of the branches; and they are white: they are very numerous, and are diſpoſed in extremely broad umbells.

The ſeeds are very large and brown.

It is common in paſtures, and flowers in July.

C. Bauhine calls it *Sphondylium vulgare hirſutum*. Others, *Sphondylium vulgare*.

It is an emollient outwardly applied.

2 Jagged Cow-Parſnep.

Sphondylium foliis tenuius diviſis.

The root is long, thick, and white.

The firſt leaves are extremely large; and they are very deeply divided in the pinnated manner into narrow, and in ſome degree curled ſegments. The colour is a pale greyiſh green; and the whole leaf is hairy.

The ſtalk is upright and ſtriated, not much branched, and five or ſix feet high.

The leaves on this are placed alternately; they reſemble thoſe from the root: the colour is pale green, and rough.

The flowers are white, and have a faint tinge of purple often very agreeably ſhaded over them. they ſtand in rounder and ſmaller umbells than in the other.

The ſeeds are large and brown.

We have it very frequently in hilly paſtures. It flowers in Auguſt.

C. Bauhine calls it *Sphondylium hirſutum foliis anguſtioribus.*

DIVISION II. FOREIGN SPECIES.

Dwarf Cow-Parſnep.

Sphondylium pumilum.

The root is long, ſlender, and rediſh.

The leaves that firſt riſe from it are ſmall, and divided into five parts, ſupported on long footſtalks, and of a pale green.

The ſtalk is firm, upright, branched, and a foot high.

The leaves on it are ſmall, divided into three parts, and ſupported on ſlender footſtalks.

The flowers are ſmall and rediſh.

It is a native of the hilly parts of Germany, and flowers in Auguſt.

C. Bauhine calls it *Sphondylium Alpinum parvum.*

GENUS II.

PARSNEP.

PASTINACHA.

THE flowers are diſpoſed in large, rounded, but flat umbells, on divided and ſubdivided ſtalks: theſe riſe naked from the ſtalk, having no leafy cup. Each flower is compoſed of five petals, which are pointed and crooked. The cup is very minute, but is divided into five parts; and the ſeeds are of a flatted, oblong figure, and foliaceous.

Linnæus places this among the *pentandria digynia*; the threads in the flower being five, and the ſtyles two.

DIVISION I. BRITISH SPECIES.

Wild Parſnep.

Paſtinacha ſylveſtris.

The root is long, ſlender, white, woody, and of a ſweet taſte.

The firſt leaves are large, and beautifully divided in the pinnated manner; their ſegments being numerous and narrow, and their colour a yellowiſh green.

The ſtalk is upright, firm, branched, ſtriated, and of a yellowiſh colour.

The leaves ſtand alternately on it; and they reſemble thoſe from the root, but they are ſmaller.

The flowers are little, and of a faint yellow.

It is common in dry paſtures, and flowers in Auguſt.

C. Bauhine calls it *Paſtinacha ſylveſtris latifolia.* Others, *Elaphoboſcum.*

Some have thought the *garden-parſnep* raiſed from this by culture; but repeated trials ſhew otherwiſe.

DIVISION II. FOREIGN SPECIES.

Garden-Parſnep.

Paſtinacha ſativa.

The root is very large, white, long, tender, and of a ſweet taſte.

The leaves which riſe firſt from it are large, elegantly and regularly divided in the pinnated manner, and of a yellowiſh green.

The ſtalk is two yards high, firm, branched, yellowiſh, ſtriated, and hollow.

The leaves on this reſemble thoſe from the root; but they are ſmaller.

The flowers are little and yellow, and the ſeeds are light and broad.

It is wild in the Greek iſlands; where it acquires the full ſtature, but has not the true ſweetneſs of the root unleſs cultivated.

It appears we had the ſeeds originally thence, though we have now ſo long cultivated the plant from thoſe ripened in our gardens, that it has been forgotten.

C. Bauhine calls it *Paſtinacha latifolia ſativa.*

All know the uſe of the roots in food; and they are very nouriſhing and wholeſome.

GENUS III.

TORDYLIUM.

THE flowers are diſpoſed in moderately large, irregular umbells, on divided and ſubdivided footſtalks; and have at the bottom a kind of cup, formed of ſeveral long, narrow leaves. Each flower is compoſed of five regular petals, which are bent, and heart-faſhioned. The cup is ſmall. The ſeeds are large and roundiſh, two grow together, and they have ſerrated edges.

Linnæus places this among the *pentandria digynia*; the threads in the flower being five, and the ſtyles two.

1. Great Tordylium.

Tordylium majus.

The root is long, ſlender, and hung with a few ſtraggling fibres.

The firſt leaves are large, and divided in the pinnated manner into numerous, ſhort, obtuſe ſegments.

The ſtalk is firm, upright, and five feet high: it is ſtriated, a little hairy, as are alſo the leaves, and is divided into ſeveral branches toward the top.

The leaves are placed alternately on it; and they reſemble thoſe from the root, but that they are ſmaller.

The flowers are ſmall and white.

The ſeeds are large, flat, and broad, brown or rediſh in the middle, and whitiſh at the edges.

We have it in dry paſtures, and under hedges, but not common. It flowers in July.

C. Bauhine calls it *Seſeli Creticum majus.* Others, *Tordylium maximum.* We have no Engliſh name for any plant of this genus.

2. Small Tordylium.

Tordylium minus.

The root is long, ſlender, white, and hung with a few fibres.

The firſt leaves are large, and ſupported on long footſtalks: they are compoſed each of a great number of ſmall, ſhort, and broad ſegments, which have alſo their ſeparate long footſtalks.

The ſtalk is round, ſtriated, branched, and about a foot high.

The leaves are placed irregularly on it; and reſemble thoſe from the root, but that they are ſmaller.

The flowers are ſmall and white.

The ſeeds are large, and very beautiful: they form together a kind of flat fruit, which has a whitiſh curled edge.

It is found in our ſouthern counties, but is not common. It flowers in July.

C. Bauhine calls it *Seſeli Creticum minus.*

The ſeeds are carminative, and they work alſo by urine.

GENUS IV.

HOGS FENNEL.

PEUCEDANUM.

THE flowers are diſpoſed in a very large umbel, upon divided and ſubdivided branches; and the whole is ſurrounded at its baſe by a number of narrow, crooked or twiſted leaves. Each flower is compoſed of five oblong, undivided petals; and the cup to it is ſmall, and divided by five dents at the edge. The ſeeds are oblong and ſtriated.

Linnæus places this among the *pentandria digynia*; the threads in the flower being three, and the ſtyles two.

Hogs

Hogs Fennel.

Peucedanum vulgare.

The root is long and thick, and at the top is uſually covered with a ſhaggy matter, formed of the ribs of decayed ſtalks: it is black on the outſide, green within, and, when cut, yields a yellow juice of a ſtrong unpleaſant ſmell.

The firſt leaves are placed on long footſtalks: they are large, and they are divided and ſubdivided by threes into a multitude of long, narrow ſegments.

The ſtalk is a yard high, ſtriated, and branched; and the leaves are placed irregularly on it, and are like thoſe from the root.

The flowers are ſmall and yellow.

It is common by the Thames ſide in Kent and Eſſex, and elſewhere. It flowers in July.

C. Bauhine calls it *Peucedanum Germanicum*. Others, *Peucedanum vulgare*.

It is an unpleaſant, but a very valuable medicine.

A ſyrup made of the juice of the root with honey is excellent in aſthmatick caſes.

A decoction of it operates by urine, and is good againſt obſtructions of the viſcera.

It is alſo good outwardly in headachs.

GENUS V.

SHEPHERDS NEEDLE.

SCANDIX.

THE flowers are diſpoſed in ſmall umbells upon long divided ſtalks, which have no general cup, but a few oblong leaves to the ſubdiviſions. Each flower is compoſed of five unequal petals, of a heart-faſhioned ſhape The cup is very minute. The ſeeds are long, and ſharp-pointed: two grow together; and each is rounded and ſtriated on the outſide, and ſmooth and flat within.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two.

DIVISION I. BRITISH SPECIES.

Shepherds Needle.

Scandix vulgaris.

The root is long, ſlender, white, and hung with a few ſlight fibres.

The leaves are ſmall, and ſupported on ſhort footſtalks: they are very finely divided; and their colour is a very dark green.

The ſtalks are numerous, green, branched, and a foot high.

The leaves ſtand irregularly on them, and reſemble thoſe from the root; but they are ſmaller.

The flowers are moderately large and white.

The ſeeds are long and ſlender.

It is common in corn-fields, and flowers in Auguſt.

C. Bauhine calls it *Scandix ſemine roſtrato vulgaris*. Others, *Pecten Veneris*.

Its virtues are not known.

DIVISION II. FOREIGN SPECIES.

Small Shepherds Nettle.

Scandix minor.

The root is long, ſlender, white, and furniſhed with a few fibres.

The leaves are divided into numerous and very ſmall ſegments; and they have a pleaſant ſmell.

The ſtalks are numerous, branched, ſtriated, and a foot high.

The leaves are placed alternately on theſe, and their footſtalks ſurround the ſtalk at the baſe: they are like thoſe from the root, but ſmaller.

The flowers ſtand at the extremitie of the branches in little umbells; and they are ſmall and white.

The ſeeds are long, and very ſlender.

It is common in the Greek iſlands, where they eat the young leaves in ſallads.

C. Bauhine calls it *Scandix Cretica minor*.

GENUS VI.

CHERVIL.

CHÆROPHYLLUM.

THE flowers are diſpoſed in broad, ſpreading umbells, on divided and ſubdivided branches; and they have no cup to ſurround their baſe at the ſtalk, but ſome long leaves under the ſubdiviſions. Each flower is compoſed of five bent and heart-faſhioned petals. The cup is very minute; and the ſeeds are oblong, ſlender, and pointed at the top, rounded on the outſide, and flat within.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two in each flower.

DIVISION I. BRITISH SPECIES.

1. Wild Myrrhis.

Chærophyllum ſylveſtre.

The root is long, white, and hard, and has a ſweetiſh taſte, but with a ſharpneſs, and an aromatick flavour.

The firſt leaves are divided into a great number of ſegments, which are of a pale green, a little hairy, and ſtand on hairy ribs.

The ſtalk is hollow, ſtriated, and branched, and is a yard high.

The leaves are placed alternately on it, and reſemble thoſe from the root.

The flowers are ſmall and white; and the ſeeds, when they are ripe, brown.

It is common under hedges, and flowers in July.

C. Bauhine calls it *Chærophyllum ſylveſtre.* Others, *Myrrhis ſylveſtris*, *Cerefolium ſylveſtre*, and *Anthriſcus Plinii.*

When the plant is in flower, the ſtalk ſwells juſt under the joints.

2. Wild Chervill.

Chærophyllum caule equali.

The root is long, thick, white, and furniſhed with a few fibres.

The firſt leaves are very large, and they are formed of numerous indented ſegments: they are naturally of a duſky green, and ſometimes they are rediſh.

The ſtalk is upright, ſtriated, and a yard and half high: it is divided into many branches; and it is of a regular thickneſs, not ſwelling at the joints as the other.

The flowers are ſmall and white; and the ſeeds are oblong and brown.

It is common by hedges, and flowers in May.

C. Bauhine calls it *Myrrhis ſylveſtris ſeminibus lævibus.* Others, *Cicutaria.* Our people, *Cow-weed.*

DIVISION II. FOREIGN SPECIES.

Garden-Chervill.

Chærophyllum ſativum.

The root is long, thick, white, and of an aromatick, and not diſagreeable taſte.

The leaves that riſe firſt are large, and divided into numerous, broad, ſhort, indented ſegments; of a pale green colour, and of an agreeable flavour.

The ſtalks are ſtriated, hollow, upright, branched, and ſwelled in a kind of round knots under the joints.

The leaves on them reſemble thoſe from the root; but the ſegments are narrower, and they are of a paler green.

The flowers are ſmall and white; and the ſeeds, when ripe, are black.

It is a native of the Greek iſlands, and flowers in June.

C. Bauhine calls it *Chærophyllum ſativum.* Our gardeners call it *Sweet fern.*

It is an agreeable plant in ſallads; and, when taken as a medicine, operates by urine; and is good againſt obſtructions of the viſcera.

GENUS VII.

SPIGNELL.

MEUM.

THE flowers are diſpoſed in ſpreading umbells on divided and ſubdivided ſtalks; and at the baſe of theſe on the ſtalk grow a number of long, narrow leaves. Each flower is compoſed of five nearly equal petals; which are of a heart-faſhioned ſhape, and ſomewhat bent. The cup is very minute. The ſeeds are oblong, and ſmaller at one end, and rounded and ſtriated on one ſide, and flat and plain on the other.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two.

DIVISION I. BRITISH SPECIES.

Common Spignell.

Meum vulgare.

The root is long, thick, and furniſhed with a few fibres: it is brown on the outſide, and white within, and has a firm heart: the outer ſubſtance is tender, and of an aromatick, and not diſagreeable taſte. There frequently are ſide-ſhoots from the old roots; and at their tops there uſually is a large thready tuft, of a brown colour, which is formed of the fibres of decayed footſtalks.

The leaves which riſe from the root are large, and of a blackiſh green colour; and they are divided in an elegant manner into regular and extremely ſlender ſegments.

The ſtalk is upright, ſtriated, branched, and two feet high.

The leaves on it reſemble thoſe from the root; but they are ſmaller, and ſomewhat paler coloured.

The flowers are ſmall and white.

The ſeeds, when ripe, are black.

It is found in our weſtern counties in rich, damp ſoils, but not common. It flowers in June.

Cow Parsnip

Wild Parsnip

Garden Parsnip

Great Sandylium

Small Sandylium

Hedge Fennell

Shepherds Needle

Small Shepherds Needle

Wild Myrrhis

Wild Chervill

Garden Chervill

Common Spignell

Italian Spignell

Garden Myrrhis

Wild Angelica

Great Angelica

Wild Alexanders

Garden Alexanders

C. Bauhine calls it *Meum foliis anethi.* Others only, *Meum.* Our people, *Baldmoney.*

It is a very powerful diuretick and deobſtruent.

It is good in the jaundice, and it promotes the menſes.

The root poſſeſſes moſt virtue, and is beſt given in infuſion.

DIVISION II. FOREIGN SPECIES.

Italian Spignell.

The root is long and thick, black on the outſide, white within; and of a coarſe taſte, and diſagreeable ſmell.

The firſt leaves are large; and they are divided into numerous longiſh and very ſlender ſegments.

The ſtalk is round, ſtriated, upright, and a foot and half high.

The leaves ſtand alternately on this; and they are divided into fine ſegments, in the manner of thoſe from the root.

The flowers are ſmall and white, and the ſeeds are ſtriated and large.

It is a native of Italy, and flowers in May.

C. Bauhine calls it *Meum latifolium adulterinum.*

GENUS VIII.

ANGELICA.

THE flowers are diſpoſed in large umbells, of a globular figure, upon divided and ſubdivided footſtalks; and under theſe there ſtand a few oblong leaves. The ſmaller cluſters, which together form the whole umbel, are perfectly globular; and at the baſe of theſe there ſtand eight ſmall leaves. Each flower is compoſed of five pointed petals, which are a little bent. The ſeeds are of an oval form, rounded and ſtriated on one ſide, and ſmooth and flat on the other.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two.

1. Great Angelica.
Angelica major.

The root is long, thick, and furniſhed with many fibres: the outſide is brown; but it is white within, and when cut yields a thick, yellowiſh juice: its taſte is warm and aromatick, and its ſmell very fragrant and agreeable.

The firſt leaves are extremely large: they ſtand upon thick, fleſhy footſtalks; and are compoſed of oblong, broad, pointed, and ſerrated ſegments.

The ſtalk is round, hollow, upright, thick, and of a fine green: it is divided toward the top into many branches, and is ſeven or eight feet high.

The leaves on it are placed irregularly; and they reſemble thoſe from the root, but they are ſmaller.

The flowers are ſmall, and of a greeniſh white.

The ſeeds are large, and greeniſh.

It is wild in our northern counties; but for its uſe is cultivated alſo every where in gardens.

C. Bauhine calls it *Angelica ſativa*; a name moſt others have copied.

It is a plant of great virtues; cordial, ſudorifick, and ſtomachick.

The candied ſtalks are a very agreeable way of taking it, and have a great deal of virtue; but the roots and ſeeds poſſeſs it in the higheſt degree. They are beſt given in powder; a ſcruple of the root, or five grains of the ſeeds, for a doſe.

2. Wild Angelica.
Angelica ſylveſtris.

The root is long, white, thick, and furniſhed with many long fibres.

The firſt leaves are very large: they are ſupported on purpliſh footſtalks; and are formed of numerous ſmall parts, which are broadeſt at the baſe, ſerrated, ſharp-pointed, and of a duſky green.

The ſtalk is round, firm, upright, very much branched, and ſix feet high.

The leaves ſtand irregularly on it, and ſurround it with the baſes of their footſtalks: they are like thoſe from the root, but ſmaller.

The flowers are ſmall and whitiſh; and they form vaſt umbells.

The ſeeds are ſwelled and ſtriated.

It is common by waters, and flowers in June.

C. Bauhine calls it *Angelica ſylveſtris major.*

GENUS IX.

HERB-GERARD.
PODAGRARIA.

THE flowers are diſpoſed in a rounded convex umbel, on divided and ſubdivided branches: at the baſe of this there are no leaves, nor at the place of their ſubdiviſions. Each flower is compoſed of five oval, hollowed, and nearly equal petals. The cup is very minute. The ſeeds are of an oval, oblong form, ſtriated, and ſwelled on one ſide, and flat and ſmooth on the other.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two in the flower. But he takes away its received name, and calls it *ægopodium.*

Of this genus there is but one known ſpecies, and that is a native of Britain.

Herb-Gerard.
Podagraria.

The root is ſlender and creeping; and it has a ſlight taſte of angelica.

The firſt leaves are placed on long, purpliſh footſtalks; and they are compoſed each of numerous, ſmall, ſerrated ſegments, of a pale green colour.

The ſtalk is round, ſtriated, branched, and two feet high.

The leaves ſtand alternately on it, and reſemble thoſe from the root, but that they are ſmaller, and compoſed of fewer parts.

The flowers are ſmall and white.

The ſeeds are moderately large and brown.

The leaves of this plant have been celebrated as a remedy for the gout; but they do not deſerve what has been written of them.

GENUS X.

ALEXANDERS.

SMYRNIUM.

THE flowers are diſpoſed in an irregular, large umbel, which from time to time increaſes in bigneſs till they are all open. There is no growth of leaves under the principal or ſecondary footſtalks. Each flower is compoſed of five narrow, pointed, and ſomewhat bent petals. The cup is very minute. The ſeeds are large, and of a lunulated figure, rounded at the back, and marked with three ſtriæ, and flat on the other ſide.

Linnæus places this among the *pentandria digynia*; the flower having five threads, and two ſtyles.

DIVISION I. BRITISH SPECIES.

Alexanders.
Smyrnium vulgare.

The root is long, thick, and white; of a ſtrong ſmell, and an acrid taſte.

The leaves that riſe from it are very large: they are compoſed of numerous, ſhort, broad ſegments; which are nicked at the edges, and of a dark green: their taſte is not unpleaſant.

The ſtalk is upright, firm, ſtriated, branched, and ſix feet high.

The leaves on theſe reſemble thoſe from the root; but they are ſmaller.

The flowers are ſmall, and of a greeniſh white; and the ſeeds, when ripe, are brown.

It is found on our weſtern coaſts among rocks, and flowers in Auguſt.

C. Bauhine calls it *Hippoſelinum Theophraſti, vel Smyrnium Dioſcoridis.* Others, *Smyrnium.*

It is a very wholeſome and agreeable plant. The leaves and their footſtalks blanched are very pleaſant raw or in ſoops; and they are good againſt ſcorbutick complaints.

DIVISION II. FOREIGN SPECIES.

Perfoliate Alexanders.
Smyrnium perfoliatum.

The root is long, thick, and white.

The leaves that riſe from it are very large and beautiful: they are finely divided into numerous, ſhort, broad ſegments: which are deeply ſerrated, and of a freſh green colour.

The ſtalk riſes in the centre of theſe; and is round, ſtriated, branched, and of a pale green.

The leaves that grow on this are perfectly unlike thoſe from the root: they are roundiſh, but pointed, and undivided: the ſtalk runs through them.

The flowers are ſmall and whitiſh; and the ſeeds, when ripe, are black.

It is a native of the Greek iſlands, and flowers in July.

C. Bauhine calls it *Smyrnium peregrinum rotundo folio.*

GENUS XI.

EARTHNUT.

BULBOCASTANUM.

THE flowers are diſpoſed in ſmall umbells, compoſed of divided and ſubdivided branches; and at the baſe of the ſtalks, and ſubdiviſions of them, are placed ſeveral ſmall, oblong, ſlender leaves. Each flower is compoſed of five petals, nearly equal in ſize, heart-faſhioned at the end, and a little bent. The cup is very ſmall. The ſeeds are of an oval form, convex on one ſide, and flat on the other.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two in each flower.

Authors ſpeak of a larger and leſſer *Earthnut*; but they differ only as varieties. There is but one ſpecies of this genus, and that is a native of Britain.

Earthnut.

Bulbocaſtanum.

The root is a tuberous lump, of the bigneſs of a cheſnut, and of a ſweet pleaſant taſte: it lies at about five inches depth; and the plant riſes from it in a ſmall white ſtalk. The root is brown on the outſide, and white within.

The leaves are beautifully divided into ſlender parts.

The ſtalk is firm, upright, ſtriated, and two feet high.

The flowers are ſmall and white; and the ſeeds, when ripe, are blackiſh.

It is common in dry, hilly paſtures, and flowers in Auguſt.

C. Bauhine calls it *Bulbocaſtanum majus*. Others, *Bulbocaſtanum majus*, and *minus*.

The root is eatable and wholeſome.

GENUS XII.

WATER DROPWORT.

ŒNANTHE.

THE flowers are diſpoſed in ſmall umbells, placed upon a few principal ſtalks, and many ſhort ones at the ſubdiviſions. There ſtand ſeveral ſhort leaves at the baſe of the principal footſtalks, and alſo of the ſubdiviſions. Each flower is compoſed of five petals, but in an unequal manner; thoſe at the edges having the petals larger, and ſplit; thoſe in the centre having them only heart-faſhioned, and a little bent. The cup is large, and divided into five ſegments. The ſeeds are two: they are of an oval figure, rounded, and ſtriated on one ſide, and plain on the other, and dented at the top.

Linnæus places this among the *pentandria digynia*; the ſtyles being two, and the threads five in each flower.

1. Common Water Dropwort.

Œnanthe vulgaris.

The root is compoſed of numerous fibres, with ſmall fleſhy bulbs or tuberous parts connected to them.

The firſt leaves are ſmall, and lightly divided into a few long, ſlender ſegments.

The ſtalk is upright, hollow, ſtriated, and two feet high.

The leaves on this are divided into numerous, long, and ſlender ſegments; and are of a faint green.

The flowers are ſmall and white, and the ſeeds are large and brown.

It is common by waters, and flowers in June.

C. Bauhine calls it *Œnanthe aquatica*. Others, *Filipendula aquatica*.

It is a diuretick and deobſtruent, but is not in uſe at this time.

2. Leſſer Water Dropwort.

Œnanthe minor triflora.

The root is fibrous; and has a few oblong, tuberous pieces connected to the ſtrings.

The firſt leaves are ſmall, and divided into ſeveral long, ſlender ſegments, of a bluiſh green.

The ſtalks are weak, hollow, ſtriated, very ſlender, and not more than ten inches high.

The leaves on theſe reſemble thoſe from the root, being compoſed of a few fine ſmall irregular ſegments.

The flowers are ſmall and white, and the principal ſtalks, which form the umbel, are only three: the ſubdiviſions are more numerous.

The ſeeds are large and brown.

It is not uncommon about waters in our ſouthern counties, and in ſome other places. It flowers in July.

Ray calls it *Œnanthe aquatica triflora.*

3. Hemlock Dropwort.

Œnanthe cicutæ facie.

The root is compoſed of numerous, long, thick, tuberous parts; and is of a very unpleaſant taſte, and full of a juice which turns yellow on coming to the air.

The firſt leaves are divided into numerous, broad, oblong, ſerrated ſegments; and are very large.

The ſtalk is ſtriated, round, branched, and three feet high.

The leaves on theſe reſemble thoſe from the root, but they are ſmaller; and they are of a pale green.

The flowers are ſmall, and the umbells of them moderately large.

It is common about the Thames ſide, and elſewhere by waters. It flowers in July.

C. Bauhine calls it *Œnanthe chærophylli foliis*. Others, *Œnanthe cicutæ facie.*

The roots are the moſt terrible poiſon England produces.

4. Pimpernell Dropwort.

Œnanthe foliis pimpinella ſaxifragæ.

The root is compoſed of long fibres, with a few tuberous lumps connected to them.

The firſt leaves are very elegantly divided into numerous, oblong, pointed parts; and are of a deep green.

The ſtalk is ſtriated, branched, and a foot high.

The leaves on it are ſmall, finely divided, and of a pale green.

The flowers are very little and white.

The ſeeds are brown.

We have it by the ſides of our fen-ditches. It flowers in Auguſt.

J. Bauhine calls it *Œnanthe Stapholini folio*, a name copied by moſt others.

GENUS

GENUS XIII.

SIUM.

THE flowers are placed in rounded umbells, compoſed of extended flat parts on the ſubdiviſions of the branches; and there are at the baſe of the principal footſtalks, and of their ſubdiviſions, ſeveral little leaves. Each flower is compoſed of five petals, of equal ſize, undivided at the top, and ſomewhat bent. The cup is very minute. The ſeeds are roundiſh, and ſtriated, but flatted on one ſide.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two in the flower.

1. Baſtard Stone-Parſley.

Sium foliis ſerratis.

The root is long, ſlender, and white.

The firſt leaves are placed on long footſtalks; and they are compoſed of numerous, ſhort, indented ſegments, of a deep green.

The ſtalk is round, upright, ſlender, and branched, and of a ſhining green.

The leaves on it are divided into numerous ſegments, and ſerrated; and their colour is a beautiful green.

The flowers ſtand at the top of all the branches in little umbells: they are ſmall and white.

The ſeeds are very ſmall, ſtriated, and brown; and they have a warm aromatick taſte.

It is common under hedges, and flowers in Auguſt.

C. Bauhine calls it *Siſon quod amonum officinis noſtris*. Others, *Amonum officinarum*, and *Petroſelinum Macedonicum Fuchſii*.

The ſeeds are good againſt flatulencies, and in nervous diſorders.

2. Honewort.

Sium ſegetum.

The root is long, ſlender, and furniſhed with a few fibres.

The firſt leaves are extremely beautiful: about four riſe from the root; and they ſpread themſelves on the ground: they are long, moderately broad, and regularly pinnated: each is compoſed of about ſeven pairs of pinnæ, with an odd one at the end; and theſe are elegantly ſerrated, and of a fine green.

The ſtalk is round, ſtriated, and branched.

The leaves are placed alternately on it; and they are divided into narrow ſegments; but they have not the form or elegance of thoſe at the root.

The flowers are ſmall and white, and the ſeeds are ſtriated and crooked.

It is common in corn fields, and on ditch-banks. It flowers in July.

Ray calls it *Sium arvenſe*. Others, *Sium ſegetale*, and *Selinum Sii foliis*.

A pultice of the leaves is ſaid to be excellent againſt hard ſwellings: it had its Engliſh name thence; *bone* being a term uſed by the country-people in ſome places for ſuch ſwellings.

3. Great Water-Parſnep.

Sium aquaticum maximum.

The root is compoſed of numerous fibres.

The firſt leaves are divided into ſmall and fine ſegments; but theſe ſoon fade and periſh: in their places appear large pinnated leaves.

The pinnæ are oblong, ſerrated, and ſharp-pointed; and their colour is a bright green.

The ſtalk is round, upright, ſtriated, branched, and two yards high.

The leaves on this are placed alternately; and they are pinnated and ſerrated, and of a pale green.

The flowers are ſmall and white; and they are formed into large umbells.

The ſeeds are ſmall and brown.

It is common about ditches, and flowers in July.

C. Bauhine calls it *Sium latifolium*. Others, *Sium aquaticum maximum*.

4. Common upright Water-Parſnep.

Sium erectum vulgare.

The root is compoſed of numerous, long, and ſlender fibres.

The firſt leaves are large and pinnated: each is compoſed of ſeveral pairs of pinnæ, with an odd one at the end; and theſe are narrow, ſharp-pointed, ſerrated, and of a pale green.

The ſtalk is upright, ſtriated, branched, and two feet high.

The leaves are placed irregularly on it; and they are like thoſe from the root.

The flowers are ſmall and white; and they ſtand in large umbells at the tops of the ſtalks and branches.

It is common in watery places, and flowers in July.

C. Bauhine calls it *Sium ſive Apium paluſtre foliis oblongis*.

5. Creeping Water-Parſnep.

Sium minus repens.

The root is ſmall and fibrous.

The ſtalks are numerous, ſlender, and weak: they lie upon the ground, or riſe very imperfectly from it; and they take root at the joints.

The leaves are pinnated; and the pinnæ are oblong, ſharp-pointed, and ſerrated.

The flowers are ſmall and white: they are diſpoſed in little umbells; and are placed, not on the tops of the branches, as in others, but at the joints of the ſtalks.

The ſeeds are ſmall and brown.

It is common in watery places, and flowers in June.

Ray calls it *Sium umbellatum repens*. Others, *Sium ad alas floridum*.

6. The

Earth nut

Comman water Dropwort

Leſser water Dropwort

Hemlock Dropwort

Pimpernell Dropwort

Bastard Stone Parsley

Honewort

Great water Parsnep

Common upright water Parsnep

The Least water Parsnep

Long leavd water Parsnep

Great Burnet Saxifrage

Small Burnet Saxifrage

The Caraway Plant

Scotish Sea Parsley

Smallage

Common Hemlock

Small Hemlock

6. The leaſt Water-Parſnip.

Sium minimum foliis variis.

The root is compoſed of many ſmall fibres.

The firſt leaves are divided into a multitude of extremely fine ſegments.

The ſtalks are round, ſtriated, branched, and about ſix inches high.

The leaves are placed alternately on theſe; and they are formed of broad, ſhort, and dentated ſegments; of a pale green, altogether unlike thoſe which riſe firſt from the root.

The flowers are ſmall and white; and they ſtand on the tops of the branches in little umbells.

The ſeeds are ſtriated and brown.

It is common in ſhallow waters, and flowers in June.

Ray calls it *Sium puſillum foliis variis.* Others, *Sium minimum umbellatum foliis variis.*

7. Long-leaved Water-Parſnip.

Sium folio anguſto longiore.

The root is long, thick, and furniſhed with many fibres.

The leaves that firſt riſe from it are large, and very beautiful: they are divided by threes into very long, narrow, and elegantly ſerrated ſegments.

The ſtalk is round, upright, ſtriated, branched, and four feet high.

The leaves ſtand irregularly on it; but they are very beautiful, reſembling thoſe from the root.

The flowers are ſmall, and placed in large umbells.

The ſeeds are ſtriated and brown.

It is common about our fen-ditches, and elſewhere in watery places. It flowers in Auguſt.

C. Bauhine calls it *Sium erucæfolio.* Others, *Sium oluſatrifolio.* Ray calls it *Cicuta aquatica.* He has given many accounts of perſons periſhing by eating it.

GENUS XIV.

BURNET SAXIFRAGE.

PIMPINELLA SAXIFRAGA.

THE flowers are diſpoſed in moderately large and rounded umbells, upon divided and ſubdivided branches; and there are no leaves by way of cup, under either the principal branches or the ſubdiviſions. Each flower is compoſed of five nearly equal petals; and they are heart-faſhioned at the ends, and bent. The cup is very ſmall. The ſeeds are long and ſlender, ſtriated on the back, and pointed.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two in each flower.

1. Great Burnet Saxifrage.

Pimpinella ſaxifraga foliis variis.

The root is long, ſlender, and furniſhed with a few fibres.

The leaves that firſt riſe from it are pinnated in a very elegant manner: each is formed of three or four pairs of roundiſh pinnæ, with an odd one at the end; and theſe are ſerrated, and of a fine green.

The ſtalk is upright, ſlender, ſtriated, and divided into branches.

The leaves on theſe are placed irregularly; and they are divided into five narrow ſegments.

The flowers are white, and very ſmall.

The ſeeds are ſmall and brown.

It is found under warm hedges in our midland counties, and flowers in Auguſt.

C. Bauhine calls it *Pimpinella ſaxifraga major umbella Candida.*

2. Small Burnet Saxifrage.

Pimpinella ſaxifraga minor.

The root is long, ſlender, white, and hung about with a few ſtraggling fibres.

The ſtalk is upright, but ſlender, divided into branches, and a foot and half high.

The leaves ſtand alternately on it; and they are divided into ſmall ſegments, and of a faint green.

The flowers are little and white; and the ſeeds are ſtriated and brown.

It is common in dry paſtures, and flowers in July.

C. Bauhine calls it *Pimpinella ſaxifraga minor*; a name moſt others have copied.

The roots of this plant are powerfully diuretick: they are good againſt obſtructions of the viſcera.

The ſeeds are carminative, and good in cholicks. The root is beſt taken in infuſion; and the ſeeds in powder, five grains for a doſe.

3. Jagged-leaved Burnet Saxifrage.

Pimpinella ſaxifraga foliis laciniatis.

The root is long, ſlender, white, and furniſhed with a few fibres.

The firſt leaves are divided and jagged; and they are of a pale green.

The ſtalk is ſlender, upright, and not much branched.

The leaves on it ſtand alternately, and are divided into many narrow ſegments.

The flowers are ſmall and white.

The ſeeds are ſmall, brown, and ſharp to the taſte.

It is common in dry paſtures, and flowers in Auguſt.

Ray calls it *Pimpinella ſaxifraga bircina minor.*

4. Tall Burnet Saxifrage.

Pimpinella ſaxifraga elatior.

The root is long, ſlender, and furniſhed with a few fibres.

The firſt leaves are large, broad, and divided into many ſmall, ſerrated, and ſharp-pointed ſegments.

The ſtalk is round, upright, and four feet high; and toward the top it is parted into many branches.

The leaves on this are divided into a few long and narrow ſegments, ſcarce at all ſerrated, and of a faint green.

The ſeeds are large, and they are ſharp-taſted.

It is common in our weſtern counties, and flowers in July.

Ray calls it *Smyrnium tenuifolium noſtras*. Others, *Pimpinella ſaxifraga hircina maxima*.

The virtues of theſe are the ſame with thoſe of the common ſmall kind, but in an inferior degree.

GENUS XV.

CARAWAY.

CARUM.

THE flowers are diſpoſed in moderately large umbells, placed on divided and ſubdivided branches; and there are no leaves at the baſe, either of the principal branches, or of their ſubdiviſions. Each flower is compoſed of five petals, which are nipped at the end, and turned down. The cup is very ſmall; and the ſeeds are oblong, ſlender, and ſtriated.

Linnæus places this among the *pentandria digynia*; the threads in the flower being five, and the ſtyles two. There is but one known ſpecies of this genus.

The Caraway Plant.

Carum.

The root is long, thick, white, and of a ſweet, but acrid taſte.

The firſt leaves are very finely divided into ſegments; and they are of a freſh green, and ſmooth.

The ſtalk is round, ſtriated, and toward the top divided into ſeveral branches.

The leaves ſtand alternately on it; and are like thoſe from the root, only ſmaller.

The flowers are placed in little umbells; and are ſmall and white, with a faint daſh of red.

The ſeeds are oblong and brown.

It is found wild in our weſtern countles; but it is not eaſy to ſay whether it does not riſe from ſeeds ſcattered by accident, and brought from elſewhere.

C. Bauhine calls it *Carum pratenſe: carvi officinarum.*

The ſeeds are an excellent carminative; and are uſed both in foods and medicine.

GENUS XVI.

SEA-PARSLEY.

LEVISTICUM.

THE flowers are diſpoſed in large umbells upon divided and ſubdivided branches: at the baſe of the principal branches there ſtand about ſeven leaves, and at the baſe of the ſubdiviſions fewer. Each flower is compoſed of five petals; and theſe are oblong, and ſtriated on one ſide. The leaves are divided by threes.

Linnæus places this among the *pentandria digynia*; the threads in the flower being five, and the ſtyles two.

He joins it in one genus with the *liguſticum*, or common lovage; but the leaves expreſs the difference ſufficiently.

Of this genus, thus diſtinguiſhed, there is but one known ſpecies, and that is a native of Britain:

Scottiſh Sea-Parſley.

Leviſticum foliis biternatis.

The root is long, ſlender, and furniſhed with a few fibres.

The firſt leaves are numerous, and ſupported on long footſtalks, which are purpliſh at the baſe.

The ſtalk is round, ſtriated, and upright; three feet high, and toward the top divided into numerous branches.

The leaves are placed irregularly on it; and both theſe and thoſe which grow from the roots are large and divided into numerous, long, and ſlender ſegments, in threes.

The flowers are ſmall and white.

The ſeeds are large and brown.

It is common on the coaſts of Scotland, and flowers in Auguſt.

Ray calls it *Liguſticum Scoticum apii folio*. Others, *Apium Scoticum*.

GENUS XVII.

SMALLAGE.

APIUM.

THE flowers are diſpoſed in moderately large umbells, on divided and ſubdivided branches: theſe have at the baſe of the diviſion one ſmall leaf. Each flower is compoſed of five petals; and they are equal in ſize, of a rounded form, and ſomewhat bent. The cup is ſo minute, that it can ſcarce be ſeen. The ſeeds are two: they are of an oval form, and ſtriated on one ſide.

Linnæus places this among the *pentandria digynia*; the threads in the flower being five, and the ſtyles two. He joins the *common parſley* or *petroſelinum* under the name *apium*; but they are properly diſtinct.

Common Smallage.

Apium vulgare.

The root is long, thick, and white; ſometimes ſimple, ſometimes divided, and of a pleaſant taſte.

The leaves are pinnated and large: they are compoſed each of three or four pairs of pinnæ, with an odd one at the end; and theſe are broad, ſerrated, and in a manner divided into three parts.

The ſtalk is thick, ſtriated, branched, and two feet high.

The leaves on theſe reſemble thoſe from the root; but they are ſmaller.

The flowers are ſmall and white; and they ſtand in thick umbells at the diviſions of the branches.

The ſeeds are brown.

It is common about waters, and flowers in July.

C. Bauhine calls it *Apium paluſtre ſeu officinarum.*

This plant, cultivated in gardens, affords what we call *celeri*, by ſome diſtinguiſhed under the name of *apium dulce*, as if a different ſpecies.

The roots of *ſmallage* are diuretick; and are good againſt the gravel, and in obſtructions of the viſcera. The beſt way of giving them is in a ſtrong decoction.

The ſeeds are warm and carminative, and alſo diuretick in a very conſiderable degree.

GENUS XVIII.

HEMLOCK.

CICUTA.

THE flowers are diſpoſed in large umbells, upon divided and ſubdivided branches. Each flower is compoſed of five petals; and they are of an equal ſize, bent down, and heart-faſhioned. The ſeeds are rounded, ſtriated on one ſide, and plain on the other.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two in each flower. But he has introduced great confuſion by his management of this genus. He divides the *common* and the *ſmall hemlock*, not as ſpecies, but into two genera; and he does not give the name of *cicuta* to either of them: the genus comprehending the *common hemlock* is called *conium*; and that comprehending the ſmall *hemlock*, *æthuſa*. The name *cicuta* is given to a genus quite diſtinct from both, including the *long-leaved water parſnip*.

The characters of this genus are not contrary to any of his diſtinctions: they belong both to the *common* and the *ſmall hemlock*; and they are properly a generical mark.

1. Common Hemlock.

Cicuta vulgaris.

The root is long, thick, and white.

The firſt leaves are extremely large, and of a dark, blackiſh green: they are divided into innumerable ſmall parts, and ſerrated at the edges.

The ſtalk is firm, upright, round, and ſix feet high: it is of a dark green colour, ſtained all over with ſpots of purple.

The leaves are placed irregularly on it; and they are very large, and like thoſe from the root: they are deeply divided, and of a dark green.

The flowers are ſmall and white; and they ſtand in large umbells.

The ſeeds are brown.

It is common in hedges, and flowers in July.

C. Bauhine calls it *Cicuta major.*

It is underſtood to be a poiſonous plant; but there does not appear any thing certain on that head. Many authors of credit affirm that it is innocent.

2. Small Hemlock.

Cicuta minor.

The root is long, ſlender, white, and furniſhed with a few fibres.

The firſt leaves are divided into numerous ſmall parts, which are deeply ſerrated, of a pale green, and very like thoſe of the common parſley.

The ſtalk is round, upright, green, and a yard high.

The leaves on this are finely divided in the

ſame manner as thoſe from the root, and they are of the ſame pale green.

The flowers grow at the tops of the branches in little umbells, ſurrounded with numerous, long, and ſlender leaves, forming a kind of general cup.

The ſeeds are ſmall and ſtriated.

It is common on ditch-banks, and in garden-ground, and flowers in June.

C. Bauhine calls it *Cicuta minor petroſelino ſimilis.* Others, *Cicutaria*, and *Cicuta fatua minor.*

GENUS XIX.

WATER HEMLOCK.

PHELLANDRIUM

THE flowers are diſpoſed in large umbells on divided and ſubdivided branches: there are no leaves at the baſe of the firſt diviſion; but ſeven ſtand at the bottom of each of the ſubdiviſions: theſe are long and ſharp-pointed. Each flower is compoſed of five petals: they are pointed, a little nicked at the top, and bent down. The ſeeds are oval, and ſmooth. The ſtalk is very thick and firm.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two in each flower.

Water Hemlock.

Phellandrium aquaticum.

The root is compoſed of numerous very long fibres.

The firſt leaves are large, and divided into a multitude of ſmall, ſlender parts, and ſplit as it were at the ends: they are of a pale green.

The ſtalk is a yard high, and of a vaſt thickneſs: it is of a pale green; and toward the top divides into numerous branches.

The leaves on this reſemble thoſe from the root, and are of a faint green.

The flowers are ſmall and white; and they ſtand in great umbells at the tops of the branches.

The ſeeds are large and brown.

It is a native of the waters, and loves a ſoft, muddy bottom. We have it in all our fen-counties, and in ſome other places. It flowers in June.

C. Bauhine calls it *Cicutaria paluſtris tenuifolia.* Others, *Cicuta paluſtris*, and *Phellandrium.*

GENUS XX.

MEADOW-SAXIFRAGE.

SESELI

THE flowers are diſpoſed in umbells, on divided and ſubdivided branches. There are no leaves at the baſe of the principal branches; but at the places of their ſubdiviſion there ſtand ſeveral, which are long and ſlender. Each flower is compoſed of five petals; and they are heart-faſhioned, and a little bent. The cup is very minute. The ſeeds are oval, and convex, ſtriated on one ſide, and ſmooth on the other.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles in each flower two.

DIVISION I. BRITISH SPECIES.

Meadow-Saxifrage.

Seſeli pratenſe vulgare.

The root is long, thick, and hung with a few fibres: it is brown on the outſide, white within, and of an acrid taſte.

The firſt leaves are placed on long footſtalks: and are large, and of a deep green: they are divided into very ſmall, narrow ſegments.

The ſtalk is upright, ſtriated, and toward the top divided into branches: it is of a yellowiſh green, and two feet high.

The flowers ſtand at the tops of the branches; and are ſmall and yellowiſh.

The ſeeds are brown, and of an acrid taſte.

The roots of this plant are diuretick; and the ſeeds carminative, both in a very eminent degree.

It is common in our meadows, and flowers in June.

J. Bauhine calls it *Saxifraga Anglorum.* Others, *Seſeli pratenſis*, and *Silaus Anglicus.*

DIVISION II. FOREIGN SPECIES.

French Meadow-Saxifrage.

Seſeli pratenſe Monſpeſſulanum.

The root is long and thick, brown on the outſide, white within, and of an aromatick taſte: it is uſually divided at the top into ſmall heads; and they are edged with a hairy ſubſtance, formed of the fibres of decayed ſtalks.

The firſt leaves are large, and of a pale green; and they are divided into numerous, ſmall, pointed ſegments.

The ſtalk is ſtriated, and a yard high.

The leaves on it reſemble thoſe from the root; but they are ſmaller; and they are of a yellowiſh green colour.

The flowers are ſmall and white; and the ſeeds, when ripe, are brown. It is common in paſtures in France.

C. Bauhine calls it *Seſeli pratenſe*.

GENUS XXI.

SAMPIRE.

CRITHMUM.

THE flowers are diſpoſed in large hemiſpherical umbells, on divided and ſubdivided branches: There are long and narrow leaves at the baſe, both of the larger and ſmaller diviſions. Each flower is compoſed of five petals; which are of an oval figure, and a little bent down. The cup is very ſmall. The ſeeds are oblong, ſtriated, and rounded on one ſide.

Linnæus places this among the *pentandria digynia*; the threads in the flower being five, and the ſtyles two.

Fleſhy-leaved Crithmum.

Crithmum foliis craſſis.

The root is long, thick, fleſhy, and of a very agreeable aromatick taſte.

The firſt leaves are very large; and they are divided into numerous, ſmall, but thick and fleſhy ſegments, of a pale green colour; and of a ſaltiſh, but not diſagreeable taſte.

The ſtalk is round, thick, ſtriated, and ſpreading; and it is two feet high.

The leaves reſemble thoſe from the root; and they are placed on the ſtalk, irregularly.

The flowers are ſmall and yellow.

The ſeeds are brown.

It is common about our ſea coaſts, and flowers in July.

C. Bauhine calls it *Crithmum ſive fœniculum marinum minus.*

The leaves make an excellent, agreeable, and wholeſome pickle.

GENUS XXII.

FENNEL.

FŒNICULUM.

THE flowers are diſpoſed in large umbells, on divided and ſubdivided branches, without any leaves under either. Each flower is compoſed of five petals; and they are oblong, ſharp-pointed, and bent. The cup is very minute; and the ſeeds are oblong, ſtriated, and naked.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two in each flower.

This author takes away the received name, not allowing *fennel* to be a diſtinct genus, but accounting it a ſpecies of *dill*. The difference is however obvious; the ſeeds of *dill* having a membranaceous edge, and thoſe of *fennel* being naked.

DIVISION I. BRITISH SPECIES.

Common Fennel.

Fœniculum vulgare.

The root is long, thick, white, and furniſhed with numerous fibres.

The firſt leaves are very large, and of a dark green: they are divided into innumerable fine ſegments.

The ſtalk is upright, round, branched, and four feet high.

The leaves on this reſemble thoſe from the root; and are of the ſame green colour.

The flowers are ſmall and yellow.

The ſeeds are brown, and of a ſharp aromatick taſte.

It is common wild in our northern counties, and every where in gardens. It flowers in July.

C. Bauhine calls it *Fœniculum vulgare Germanicum*. Others, *Fœniculum vulgare*.

It is uſed at our tables; and is alſo excellent in medicine. The root is a powerful and ſafe diuretick; and a decoction of it is good in the jaundice, and all obſtructions of the viſcera.

DIVISION II. FOREIGN SPECIES.

Sweet Fennel.

Fœniculum dulce.

The root is long, thick, and white.

The firſt leaves are of a pale green; and they are divided, like thoſe of *common fennel*, into numerous, fine ſegments; but they are not ſo large.

The ſtalk is round, upright, branched, and a yard high.

The leaves are placed irregularly on it; and they reſemble thoſe from the root: they are of the ſame fine diviſion, and the ſame faint green.

The flowers are larger than thoſe of *common fennel*, and of a paler yellow.

The ſeeds are large, pale-coloured, and of a ſweet taſte.

It is a native of Italy, and flowers in July.

C. Bauhine calls it *Fœniculum dulce*; a name copied by all other writers.

Its virtues are the ſame with thoſe of *common fennel*; but the ſeeds are milder or leſs acrid: they are therefore more uſed in medicine.

GENUS XXIII.

ROCK-PARSLEY.

SELINUM.

THE flowers are diſpoſed in moderately large umbells, on divided and ſubdivided branches. Each flower is compoſed of five oblong, narrow petals; and they are bent downwards. The cup is ſmall, and divided into five parts; and the ſeeds are of an oval form.

Linnæus places this among the *pentandria digynia*; the threads in the flower being five, and the ſtyles two.

Of this genus there is but one known ſpecies, and that is a native of Britain.

Rock-Parſley.

Selinum.

The root is long and ſlender, and hung about with ſeveral fibres.

The firſt leaves are ſmall, and of a pale green; and they are in a very elegant manner divided into narrow, and pointed ſegments.

The ſtalk is ſtriated, round, upright, very much branched, and about a foot high.

The leaves on it are placed irregularly; and they are, like the others, divided into ſmall ſegments.

The flowers ſtand at the tops of all the branches; ſo that the plant appears covered with them: they are ſmall and yellow.

The ſeeds are brown.

We have it in our weſtern counties very common.

C. Bauhine calls it *Pucedanum minus*. Cluſius, *Selinum montanum pumilium*.

GENUS XXIV.

CARROT.

DAUCUS.

THE flowers are diſpoſed in large umbells, which grow hollow when they are fallen; and there are circles of ſmall leaves, both under the whole umbel, and at the baſes of its ſubdiviſions. Each flower is compoſed of five petals, of irregular ſize; the outer ones being larger than the inner; and all of them are heart-faſhioned, and turned back. The cup is very minute. The ſeeds are hairy.

Linnæus places this among the *pentandria digynia*; the threads in the flower being five, and the ſtyles two.

1. Wild Carrot, called Mountain Stone-Parſley.

Daucus apium petræum album dictus.

The root is long and thick, of an acrid taſte, but not very diſagreeable; of a tender ſubſtance, white, and hung with many fibres.

The firſt leaves are large, and of a deep green; and they are compoſed of numerous, broad, ſerrated pinnæ.

The ſtalk is round, ſlender, upright, and toward the top parted into many branches.

The leaves on it are divided into narrower ſegments than thoſe from the root; and they are of a paler colour.

The flowers are ſmall and white. The ſeeds are brown and hairy, and ſtand in a hollow tuft.

It is found on dry, hilly ground, but not common.

J. Bauhine calls it *Apium petræum ſive montanum album*. C. Bauhine, *Daucus apii folio*.

2. Common Carrot.

Daucus vulgaris.

The root of the carrot is well known.

The leaves are large, and divided in a handſome manner into numerous ſmall ſegments: and they are lightly hairy, and of a pleaſant green.

The ſtalk is round, upright, and five feet high.

The leaves on it reſemble thoſe from the root; but they are ſmaller.

The flowers ſtand at the tops of the branches in large umbells; and they are little and white: ſometimes they are lightly tinged with red.

The ſeeds are light, hairy, and of a pale brown.

It is found wild in Scotland near the ſea-coaſts, where the root is yellow and hard; but the plant in all things reſembles the *garden* kind. This is the original *carrot*: the red-rooted kind is only a variety, though ſome have named it as a diſtinct ſpecies.

The root is nouriſhing and wholeſome. The ſeeds are diuretick.

3. Wild Carrot.

Daucus ſylveſtris.

The root is long and white, of a ſweetiſh, but ſomewhat acrid taſte, and hung with a few fibres.

The leaves are large, and of a pale green, finely divided into ſegments, and hairy.

The ſtalk is two feet and a half high, and is divided into many branches.

The leaves on it reſemble thoſe from the root; but they have fewer diviſions.

The flowers ſtand at the tops of all the branches in little, round umbells; and they are ſmall and white.

The ſeeds are hairy; and they form a hollow bed, like the neſt of a bird.

It is common by way-ſides, and flowers in July.

C. Bauhine calls it *Daucus ſylveſtris tenuiſolia Dioſcoridis.*

The ſeeds of this plant are excellent in the gravel, and in obſtructions of the viſcera; in the beginnings of dropſies, and in the jaundice. They operate powerfully by urine.

4. Shining-leaved Wild Carrot.

Daucus maritimus foliis lucidis.

The root is long, ſlender, white, and hung with fibres.

The firſt leaves are numerous, and divided into beautiful ſegments: they are of a fine green, and of a gloſſy ſurface.

The ſtalk is upright, branched, and two feet high: its leaves ſtand alternately, and reſemble thoſe from the root.

The flowers are ſmall and white; and the ſeeds are rough, and of a pale brown.

We have it on our ſouthern coaſts. It flowers in July.

Ray calls it *Daucus maritimus lucidus.*

DIVISION II. FOREIGN SPECIES.

Candy Carrot.

Daucus Creticus.

The root is long, ſlender, and white:

The firſt leaves are deeply divided into a multitude of ſegments; which are very narrow and pointed; and the whole leaf is of a pale green, and hairy.

The ſtalk is ribbed, upright, two feet high, and divided into numerous branches.

The leaves on it reſemble thoſe from the root, but that they are ſmaller.

The flowers are ſmall and white.

The ſeeds are oblong, hairy, and of a very pale colour.

It is a native of the Greek iſlands, and flowers in July.

C. Bauhine calls it *Daucus foliis fœniculi tenuiſſimis.* Others, *Daucus Creticus.*

The ſeeds are uſed in medicine: they are diuretick and deobſtruent, and are ingredients in many compoſitions. Nature varies a little in the characters of this plant; and Linnæus makes it a ſpecies of another genus, but the ſeeds ſhew it a *daucus.*

GENUS XXV.

BASTARD PARSLEY.

CAUCALIS.

THE flowers are placed in little umbells, on a few branches, with more numerous ſubdiviſions: there are ſome narrow leaves, both at the baſe of the larger branches, and of the ſmaller. Each flower is formed of five petals; which are ſomewhat bent, and ſplit at the top. The cup is divided into five pointed ſegments. The ſeeds are of an oval, or ſomewhat oblong figure, and are covered with a kind of prickles.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two in each flower.

1. Purple-flowered great Baſtard Parſley.

Caucalis major floſculis rubentibus.

The root is long, ſlender, and white.

The firſt leaves are large, and of a pale green: they are beautifully divided in a pinnated manner into ſhort ſegments, which are ſerrated and ſharp-pointed.

The ſtalks are two feet high, branched, and ſtriated, and of a pale green.

The

The leaves on them reſemble thoſe from the root; but they are ſmaller: they are ſmooth on the upper ſide, and hairy underneath.

The flowers ſtand at the tops of the branches in little umbells; and they are of a pale red.

The ſeeds are large and rough.

It is found in our corn-fields, but is not common. It flowers in July.

C. Bauhine calls it *Caucalis arvenſis echinata latifolia*. Others, *Lappula*.

2. Fine-leaved Baſtard Parſley.

Caucalis tenuifolia floſculis rubentibus.

The root is long, ſlender, and hung with a few fibres.

The firſt leaves are of a pale green, and divided into numerous ſmall ſegments.

The ſtalk is upright, and divided into many branches, and is two feet high.

The leaves on it reſemble thoſe from the root; but they are ſmaller, and have fewer ſegments.

The flowers are ſmall and red.

The ſeeds are little and rough, ſticking to any thing they touch.

It is common in our corn-fields in many parts of the kingdom, and flowers in Auguſt.

C. Bauhine calls it *Caucalis arvenſis echinata parvo flore et fructu*. Others, *Lappula Canaria*.

3. Jagged-leaved Baſtard Parſley.

Caucalis foliis laciniatis.

The root is long, white, and furniſhed with many fibres.

The firſt leaves are large, and divided into ſeveral branches, which are again cut and jagged into ſmaller parts.

The ſtalk is upright, and very much branched.

The leaves on it are divided into numerous, long, ſlender parts; and are of a fine green.

The flowers are ſmall and red.

The ſeeds are oblong, and very rough.

It is found in corn-fields in our ſouthern counties, and flowers in July.

Ray calls it *Echinoſpora laciniata*.

4. Hedge-Parſley.

Caucalis minor floſculis rubentibus.

The root is very long, ſlender, and white.

The firſt leaves are divided into long, narrow, ſharp-pointed, ſerrated ſegments; and are of a deep green.

The ſtalk is upright, and divided into many branches.

The leaves on it reſemble thoſe from the root; but they have fewer diviſions.

The flowers ſtand in little umbells at the tops of the branches; and they are ſmall and red.

The ſeeds are oblong, rough, ſmall, and brown.

It is common in hedges, and flowers in June.

C. Bauhine calls it *Caucalis ſemine aſpero floſculis rubentibus.*

5. Low, branched Baſtard Parſley.

Caucalis humilior ramoſa.

The root is long, ſlender, and furniſhed with ſome ſtraggling fibres.

The firſt leaves are divided into a number of oblong, ſerrated, and ſharp-pointed ſegments; and they are of a deep green.

The ſtalk is a foot high, and divided into numerous branches.

The leaves on it reſemble thoſe from the root; they are divided into longer ſegments.

The flowers are large, and of a pale red.

The ſeeds are rough and brown.

It is common in the corn-fields of Suſſex.

Ray calls it *Caucalis ſegetum minor anthriſco hiſpido ſimilis*.

6. Knotted Stone Parſley.

Caucalis nodoſa echinato ſemine.

The root is long and ſlender.

The firſt leaves are ſmall, and of a duſky green; they are divided in a pinnated manner into many ſerrated, and pointed ſegments.

The ſtalks are numerous, and a foot long; but they generally trail upon the ground: they are branched, and of a pale green.

The leaves on theſe reſemble thoſe from the roots; but they are leſs.

The flowers are placed in little umbells; and they are ſmall and white: theſe umbells are not placed at the tops of the branches, but at the joints of the ſtalks, where they adhere by a very ſhort footſtalk; ſo that they ſeem to grow to it.

The ſeeds are brown, and very rough.

It is common in corn-fields and under hedges, and flowers in June.

C. Bauhine calls it *Caucalis nodoſa echinato ſemine*.

The virtues of theſe plants are not known.

7. Hemlock-leaved Baſtard Parſley.

Caucalis cicutæ foliis pallidioribus.

The root is long, ſlender, white, and hung with ſeveral fibres.

The firſt leaves are large, and compoſed of innumerable ſegments; which are ſoft to the touch, of a remarkable pale green, and hairy.

The ſtalk is round, upright, branched, and alſo of a faint green.

The leaves on it reſemble thoſe from the root; but they are divided into ſmaller ſegments.

The flowers are placed in little umbells; not at the tops of the ſtalks, but at the diviſions; and they are ſmall and white.

The ſeeds are oblong, rough, and pointed.

It is common every where under hedges, and flowers in June.

C. Bauhine calls it *Myrrhis ſylveſtris ſeminibus aſperis*. Others, *Cerefolium æquicolorum*.

GENUS XXVI.

PRICKLY SAMPIRE.

ECHINOPHORA.

THE flowers are diſpoſed in moderately large umbells, with little leaves at the diviſions and ſubdiviſions of the branches. Each flower is compoſed of five oblong, heart-faſhioned, and bent petals. The cup is ſmall, and is divided into five ſegments. The ſeeds are rough, and the leaves of the plant are prickly.

Linnæus places this among the *pentandria monogynia*; the threads being five, and the ſtyles two in each flower.

This author does not, in his *Genera Plantarum*, allow it to be a diſtinct genus, but makes it a kind of *caucalis*. In his ſpecies he makes it of a diſtinct genus, but there joins a *caucalis* with it: in both erroneous. There is but one known ſpecies, properly diſtinguiſhed, and that is a native of Britain.

Prickly Sampire.
Echinophora.

The root is long and thick, and furniſhed with many fibres.

The firſt leaves are very broad and ſpreading: they are divided into innumerable ſmall, oblong ſegments, in an irregularly pinnated manner; and theſe are prickly at the end.

The ſtalk is very thick, round, ſtriated, upright, and divided into numerous branches.

The leaves on theſe reſemble thoſe from the root, and are in the ſame manner prickly.

The flowers are ſmall and white; and they ſtand in umbells, terminating the tops of the branches.

The ſeeds are oblong and rough.

The root of this plant is of a very agreeable taſte, and fleſhy ſubſtance.

It is common on our ſea coaſts, and flowers in Auguſt.

C. Bauhine calls it *Crithmum maritimum ſpinoſum.*

GENUS XXVII.

CORIANDER.

CORIANDRUM.

THE flowers are diſpoſed in ſmall umbells. There are no leaves at the baſe of the firſt diviſion, but three at each of the ſubdiviſions of the branches. Each flower is compoſed of five petals; and they are of unequal ſize, but all bent backward, and heart-faſhioned. The cup is ſmall, and divided into five ſegments. The ſeeds are hemiſpherical.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two in each flower.

DIVISION I. BRITISH SPECIES.

Common Coriander.
Coriandrum vulgare.

The root is long, ſlender, white, and furniſhed with a few fibres.

The firſt leaves are divided in a pinnated manner, into many broad, ſerrated ſegments.

The ſtalk is two feet high, and has many branches.

The leaves on it are divided into ſmall, narrow ſegments, and of a pale green: when bruiſed they have a very ſtrong and diſagreeable ſmell.

The flowers ſtand at the tops of the branches; and are ſmall and white, with a very faint bluſh of red.

The ſeeds are large, and of a pale brown.

We have it in our weſtern counties in dry places, and by road-ſides; perhaps native, perhaps from ſeeds caſually dropt. It flowers in July.

C. Bauhine calls it *Coriandrum majus.* Others' *Coriandrum vulgare.*

The ſeeds are cordial, and good againſt flatulences; and they are greatly recommended by their agreeable taſte.

DIVISION II. FOREIGN SPECIES.

Small Sweet Coriander.
Coriandrum minus.

The root is very long, ſlender, and white.

The firſt leaves are ſmall, and of a pale green; and they are deeply divided into ſlender ſegments.

The ſtalks are numerous and weak: they are about eight inches high; and they lie ſpread upon the ground.

The leaves on theſe reſemble thoſe from the

root; and they are of a pale green: when bruiſed they have no ill ſmell.

The flowers are ſmall and white; and the ſeeds are very large and brown.

It is a native of the Greek iſlands, and flowers in July.

C. Bauhine calls it *Coriandrum minus teſticulatum*. Others, *Coriandrum minus odorum*.

GENUS XXVIII.

HARES EAR.

BEUPLEURUM.

THE flowers are placed in umbells, on divided and ſubdivided branches. There are no leaves at the baſe of the larger branches, but there are under their ſubdiviſions. Each flower is compoſed of five petals; and theſe are ſmall, heart-faſhioned, and turned back at the ends. The cup is very ſmall, and has five dents. The ſeeds are of an oblong, oval form, ſtriated on one ſide, and plain on the other. The leaves are entire and undivided.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two in the flower.

DIVISION I. BRITISH SPECIES.

1. Thoroughwax.

Beupleurum perfoliatum.

The root is long, ſlender, white, and hard.

The ſtalk is round, upright, and toward the top divided into ſeveral branches: it is of a yellowiſh colour, and of a very firm ſubſtance.

The leaves ſtand ſingly at conſiderable diſtances; and are of a roundiſh, but ſomewhat oblong ſhape, of a firm ſubſtance, and a beautiful green.

The ſtalk runs through them: they are not at all indented at the edges, but are ſomewhat pointed at the upper end.

The flowers are ſmall, and of a beautiful yellow: they ſtand in thick tufts at the tops of the branches.

The ſeeds are ſmall and blackiſh.

It is common in the corn-fields of ſome parts of England, and flowers in July.

C. Bauhine calls it *Perfoliata vulgatiſſima*. Others, *Perfoliata vulgaris*. The more correct writers, *Beupleurum perfoliatum*.

2. Small Hares-Ear.

Beupleurum minimum.

The root is long, ſlender, and white.

The ſtalks are numerous, and very ſmall: they are a foot and half high, and are divided toward the top into a few branches.

The leaves ſtand alternately on them; and they are long, narrow, graſſy, and of a pale green.

The flowers ſtand on very ſmall umbells at the tops of the ſtalks, and on footſtalks riſing from the boſoms of the leaves: they are white and white.

The ſeeds are ſmall, and dark-coloured.

We have it in dry paſtures, and by road-ſides in Eſſex. It flowers in June.

C. Bauhine calls it *Beupleurum anguſtiſſimo folio*. Others, *Beupleurum minimum*.

DIVISION II. FOREIGN SPECIES.

Common Hares-Ear.

Beupleurum vulgare.

The root is ſmall, and furniſhed with numerous fibres.

The firſt leaves are oblong, and very broad, undivided, and rounded at the ends.

The ſtalk is round, upright, and two feet high.

The leaves ſtand alternately on it; and they are oblong, and moderately broad, of a bluiſh green, and undivided.

The flowers are ſmall and yellow.

The ſeeds are brown and acrid.

It is a native of Germany, and other parts of Europe, and flowers in June.

C. Bauhine calls it *Beupleurum vulgatiſſimum*.

GENUS XXIX.

SANICLE.

DIAPENSIA.

THE flowers are placed in little umbells on branches, ſubdivided into numerous very ſhort ones, with a few leaves underneath. Each flower is compoſed of five petals; and they are ſplit at the end, and bent. The cup is very minute. The ſeeds are convex, and rough on one ſide, and plain on the other.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two in each flower.

Common

Common Sanicle.

Diapenſia vulgaris.

The root is black, and of an acrid taſte.

The firſt leaves are ſmall, and of a deep ſhining green. They are placed on red footſtalks; and they are of a rounded form, divided into five principal parts, and ſerrated at the edges.

The ſtalk is round, upright, a foot high, and not much branched.

The leaves on it in ſome degree reſemble thoſe from the root; but they are divided into fewer parts; and theſe are ſharper, and more ſerrated.

The flowers are ſmall; and they are white, with a faint tinct of rediſh.

The ſeeds are large and rough.

It is common in our woods, and flowers in Auguſt.

C. Bauhine calls it *Sanicula officinarum*. Others, *Diapenſia*.

The root is aſtringent, and good againſt hæmorrhages. The leaves are recommended in vulnerary potions.

GENUS XXX.

MARSH PENNYWORT.

HYDROCOTYLE.

THE flowers are diſpoſed four upon a ſtalk, with a little umbell in the centre. Each is compoſed of five petals, of an oval figure, but ſharp-pointed, and ſpread open. The cup is very minute. The ſeeds are half round, and ſmall.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two in each flower.

It is truly an umbelliferous plant, though a very ſingular one.

Marſh Pennywort.

Hydrocotyle.

The root is fibrous.

The ſtalks are numerous, round, jointed, weak, and of a pale green: they run upon the ſurface of the ground, and take root at the joints.

The leaves ſtand ſingly on ſlender footſtalks; and they are round, dentated at the edges, and of a pale green.

The flowers are ſmall and white: they ſtand in very ſmall tufts, riſing from the ſtalks, with the leaves.

The ſeeds are ſmall and brown.

It is common in damp paſtures, and flowers in June.

C. Bauhine calls it *Ranunculus aquaticus cotyledanis folio*. Others, *Cotyledon paluſtre*, and *Hydrocotyle*.

The farmers have an opinion that it gives their ſheep the rot; whence they call it *white rot*.

GENUS XXXI.

ERYNGO.

ERYNGIUM.

THE flowers are diſpoſed in a ſingular kind of umbells, ſurrounded with many leaves at the baſe, and ſeparated by films. The umbells are of a convex or conic form. Each flower is compoſed of five petals; which are oblong, bent at the baſe, and marked with a line all along each of them. The cup is large, and divided to the baſe into five ſegments. The ſeeds are two; and they are oblong and rounded.

Linnæus places this among the *pentandria digynia*; the threads being five, and the ſtyles two in each flower.

1. Common Eryngo.

Eryngium vulgare Mediterraneum.

The root is extremely long, ſlender, brown, of a ſweet and very agreeable taſte; and it has a hard fibre in the centre.

The ſtalk is round, upright, tough, and toward the top is divided into numerous branches.

The leaves are large: they are placed irregularly; and they are divided deeply into ſharp and ſerrated ſegments.

The flowers are ſmall and white.

The ſeeds are of a dark brown.

We have it in our midland counties plentifully. It flowers in July.

C. Bauhine calls it *Eryngium vulgare et Camerarii*. Others, *Eryngium campeſtre*.

The root is an excellent medicine in diſorders of the breaſt and lungs. The confectioners preſerve it with ſugar; and that way it has great virtues. It is alſo given in decoction. It operates by urine when given in this manner, and is good againſt obſtructions of the viſcera, and in the jaundice.

2. Sea-Eryngo.

Eryngium marinum.

The roots are very long, tough, and creeping.

The

The ſtalk is round, firm, of a bluiſh green, and divided into a vaſt many branches.

The leaves are placed irregularly on it; and they are broad, deeply ſerrated, ſharp-pointed, and prickly.

The flowers ſtand in thick tufts; and they are ſmall and white.

The ſeeds are brown.

It is a native of our ſea-coaſts, and flowers in June.

C. Bauhine calls it *Eryngium maritimum*. Our people, *Sea-holly*.

SERIES II.

FOREIGN GENERA.

Thoſe of which no ſpecies is naturally wild in this country.

GENUS I.

HERCULES ALLHEAL.

PANAX.

THE flowers are diſpoſed in large umbells; and each is compoſed of five petals, which are nearly equal in ſize, and bent and heart-faſhioned at the top. The cup is very ſmall, and has five diviſions. The ſeeds are large, and edged with membranes in four ridges.

Linnæus places this among the *pentandria digynia*; but he does not allow it to be a diſtinct genus. He makes it a kind of *laſewort*.

Great Hercules Allheal.

Panax foliis oblique cordatis.

The root is long, and very thick.

The firſt leaves are very large, and of a deep green: they are compoſed of numerous pinnæ; which are ſharp-pointed, and irregularly heart-faſhioned at the baſe; and are placed on divided ribs.

The ſtalk is round, upright, and ſix feet high.

The leaves on this reſemble the others, but they are ſmaller.

The flowers ſtand in large umbells, and are yellow.

The ſeeds are large and brown.

It is a native of the warmer parts of Europe, and flowers in July.

C. Bauhine calls it *Panax paſtinachæ folio*. Others, *Panax Heracleum majus*.

GENUS II.

LIBANOTIS.

THE flowers are placed in large, but round umbells; and each is compoſed of five petals, which are nearly equal in ſize, and are heart-faſhioned and bent. The cup is very ſmall. The ſeeds are oval, ſtriated, and rough.

Linnæus places this among the *pentandria digynia*, as the former; but he makes it a ſpecies of another genus.

Black Libanotis.

Libanotis umbella hemiſpherica.

The root is very large, and furniſhed with a few fibres.

The firſt leaves are broad, and ſpreading: they are formed of a multitude of ſmall parts, joined to a divided rib; and theſe are ſharp-pointed, and ſerrated.

The ſtalk is round, thick, divided at the top into ſeveral branches, and four feet high.

The leaves on it reſemble thoſe from the root, but they are ſmaller.

The flowers ſtand in vaſt hemiſpherical umbells; and are white, with a faint tinge of purpliſh.

The ſeeds are large and rough.

It is a native of Germany, and flowers in Auguſt.

C. Bauhine calls it *Daucus montanus apii folio major*. Others, *Libanotis nigra Theophraſti*.

Water Stemlock

Meadow Saxifrage

Hemlock Water Dropwort

Rock Samphire

Common Fennel

Rock Parsley

Common Carrot

Purple Honewort

Hedge Parsley

Knotted Stem Parsley

Prickly Lampsana

Common Coriander

Small Sweet Coriander

Shepherds Needle

Common Hemlock

Marshpenny Wort

Common Cypress

Sea Cypress

GENUS III.

DILL.

ANETHUM.

THE flowers ſtand in large umbells: each is compoſed of five petals; and they are bent, and not ſplit at the top. The cup is very minute; but it has five diviſions. The ſeeds are of an oval figure, and edged with membranes.

Linnæus places this among the *pentandria digynia*; and he joins it in the ſame genus with *fennel*, from which it differs in the ſeeds.

Common Dill.

Anethum vulgare.

The root is long, ſlender, and hung with a few fibres.

The ſtalk is round, ſtriated, and four feet high.

The leaves ſtand at ſmall diſtances; and both theſe and thoſe from the root are divided into a multitude of very minute ſegments.

The flowers ſtand in large umbells at the tops of the branches; and they are ſmall and yellow.

The ſeeds are large and brown.

It is a native of Spain, and flowers in July.

C. Bauhine calls it *Anethum hortenſe*. Others, *Anethum vulgare*.

The ſeeds are warm and carminative. They are good againſt flatulences: they operate by urine, and they ſtrengthen the ſtomach.

GENUS IV.

THASPIA.

THE flowers are placed in great umbells at the tops of the ſtalks; and each is compoſed of five petals: theſe are oblong, bent, and pointed at the tips. The cup is very ſmall. The ſeeds are large; and they are ſurrounded by a membrane, which is nipped at the top and bottom.

Linnæus places this among the *pentandria digynia*, as the others.

Broad-leaved Thaſpia.

Thaſpia latifolia.

The root is very large, long, and full of a diſagreeable juice; and at the top there uſually are a multitude of fibrous ſubſtances, in the manner of hairs, which are the remains of decayed foot-ſtalks.

The leaves are very large, broad, and hairy; and they are divided into extremely ſmall parts.

The ſtalk is thick, ſtriated, and parted into many branches.

The flowers ſtand at the tops in large umbells; and they are ſmall and yellow.

The ſeeds are large and beautiful.

It is a native of the warmer parts of Europe, and flowers in Auguſt.

C. Bauhine calls it *Thaſpi latifolia villoſa*.

GENUS V.

FENNEL-GIANT.

FERULA.

THE flowers ſtand in great umbells, terminating the branches. Each is compoſed of five petals, equal in ſize, oblong, and ſtrait. The cup is very minute, but has five diviſions. The ſeeds are very large and flat; and each has three ridges.

Linnæus places this among the *pentandria digynia*, as the others.

Narrow-leaved Fennel Giant.

Ferula foliis capillaceis.

The root is very large, long, and furniſhed with a few fibres.

The ſtalk is ſix feet high, and toward the top it is divided into numerous branches.

The leaves are placed irregularly on it; and theſe, as well as thoſe from the root, are very large, and are divided into innumerable fine ſegments.

The flowers are ſmall and yellow.

The ſeeds are very large and brown.

It is a native of the ſouthern parts of Europe, and flowers in Auguſt.

C. Bauhine calls it *Ferula fœmina Plinii*. Others, *Ferula anguſtifolia*.

2. Broad-leaved Fennel-Giant.

Ferula ſegments latioribus.

The root is very long and thick.

The plant grows to eight feet in height, and toward the top divides into many branches.

The leaves are large, and of a deep green; and they are divided into innumerable ſegments, not

not ſo narrow as in the former kind, though of no great breadth.

The flowers are ſmall and yellow; but they form very large umbells.

The ſeeds are brown.

It is frequent in the warmer parts of Europe, and flowers in Auguſt.

C. Bauhine calls it *Ferulago latiore folio.*

3. The Aſſa Fœtida Plant.

Ferula aſſam fœtidam fundens.

The root is vaſtly thick, and of a great length.

The ſtalk riſes to ſeven feet high; and is firm, ſtriated, and of a pale green.

The leaves are very large; but they are divided into a multitude of ſmaller parts, alternately ſerrated, and of a pale green.

The flowers grow in vaſt umbells.

The ſeeds are large and brown.

It is a native of the mountains of Perſia.

Kempfer calls it *Aſſa fœtida Diſgunenſis.*

The drug called *aſſa fœtida*, ſo eminent in nervous and hyſterick caſes, is the concreted juice of the root of this plant.

GENUS VI.

LASERWORT.

LASERPITIUM.

THE flowers ſtand in great umbells, terminating the branches; and each is compoſed of five petals: theſe are nearly equal in ſize; and they are oblong, divided at the ends, and ſomewhat bent. The cup is very minute, and is divided into five parts at the edge. The ſeeds are very large, oblong, and marked with four membranes on the back.

Linnæus places this with the reſt among the *pentandria monogynia.*

Laſerwort.

Laſerpitium vulgare.

The root is long and thick, brown on the outſide, white within, and furniſhed with many fibres. The top is alſo covered with decayed filaments, which have belonged to footſtalks.

The leaves are large and pinnated: they are compoſed each of two or three pairs of broad, indented pinnæ; and are of a pale green, and lightly hairy.

The ſtalks are numerous, branched, and ſtriated, of a pale green, and four feet high.

The leaves on theſe reſemble thoſe from the root; but they are ſmaller.

The flowers terminate the branches; and are ſmall, but placed in large umbells.

The ſeeds are large and brown.

It is a native of the warmer parts of Europe, and flowers in July.

C. Bauhine calls it *Laſerpitium Gallicum.* Others only, *Laſerpitium*, or *Laſerpitium vulgare.*

GENUS VII.

CUMMIN.

CYMINUM.

THE flowers are diſpoſed in umbells, uſually in a four-fold manner, both in the diviſions and ſubdiviſions; and at the baſe of the ſtalks, and of their ſubdiviſions, are placed ſeveral narrow leaves. Each flower is compoſed of five petals, a little irregular in ſize, and ſomewhat bent in, and emarginated. The cup is ſcarce viſible. The ſeeds are two: they are convex on one ſide, and ſtriated, plain, and ſmooth on the other.

Linnæus places it among the *pentandria monogynia* with the others.

Common Cummin.

Cyminum vulgare.

The root is long, ſlender, and hung with many fibres.

The firſt leaves are divided into numerous, long, and very narrow ſegments; and are of a faint green, and a little hairy.

The ſtalk is round, ſtriated, upright, and about a foot high.

The leaves on it reſemble thoſe from the reſt, and ſtand irregularly.

The flowers are ſmall and white; and they terminate the ſtalk in moderately large umbells.

The ſeeds are large and brown.

It is a native of the Eaſt, and is alſo ſown there for the ſeeds, which are uſed in medicine. It flowers in July.

C. Bauhine calls it *Cyminum ſemine longiore.* Others, *Cyminum vulgare.*

The ſeeds are an excellent carminative, but very unpleaſant.

GENUS VIII.

MASTERWORT.

IMPERATORIA.

THE flowers are diſpoſed in rounded umbells. There are no leaves at the baſe of the principal ſtalks, but ſeveral ſmall ones at the ſubdiviſions. The cup is ſcarce viſible. Each flower is compoſed of five regular petals, nipped at the ends. The ſeeds are oval, edged with a broad rim, and marked with two furrows.

Linnæus places it with the others.

Maſterwort.

Imperatoria vulgaris.

The root is long, thick, and divided; brown on the outſide, white within, and of an aromatick, but very acrid taſte.

The ſtalk is upright, firm, ſtriated, branched, and four feet high.

The leaves are compoſed of numerous, oblong parts, ſerrated, of a deep green, and placed on branched footſtalks.

The flowers are ſmall and white; but they are placed in large umbells.

The ſeeds are brown.

It is a native of many of the warmer parts of Europe, and flowers in June.

C. Bauhine calls it *Imperatoria major*. Others, *Imperatoria vulgaris*.

The root is cordial and ſudorifick, and is greatly recommended againſt malignant and peſtilential fevers.

GENUS IX.

LOVAGE.

LEVISTICUM.

THE flowers ſtand in umbells on numerous ſubdivided branches: at the baſe ſtand ſeveral leaves, and at the ſubdiviſions four. The cup is divided into five ſegments. Each flower conſiſts of five petals; which are plain, hollowed, and turned back. The ſeeds are oblong and ſmooth, marked at the back with five ribs, and flat on the other ſide.

Linnæus places this with the reſt among the *pentandria monogynia*.

Lovage.

Leviſticum vulgare.

The root is long, thick, and furniſhed with many fibres.

The ſtalk is ſtriated, firm, ſix feet high, and divided into numerous branches.

The leaves are large; and they are compoſed of very numerous ſegments; which are oblong, ſerrated, ſharp-pointed, and of a deep, ſhining green.

The flowers are ſmall and yellow, and the ſeeds are brown.

The whole plant has a ſtrong, and not very agreeable ſmell.

It is a native of Spain, and flowers in July.

C. Bauhine calls it *Liguſticum vulgare*. Others, *Leviſticum vulgare*.

It is recommended againſt peſtilential diſorders as a cordial and ſudorifick.

An infuſion of the root operates by urine ſafely and powerfully; and is good againſt obſtructions of the viſcera, and in the gravel.

GENUS X.

SERMOUNTAIN.

SILER MONTANUM.

THE flowers are diſpoſed in umbells, on divided and ſubdivided branches; and there are ſmall leaves both at the baſes of the principal branches, and their ſubdiviſions. The cup is divided into five parts, and is very ſmall. The flowers are each formed of five equal petals, bent back at the ends; and the ſeeds have a double, foliaceous rim.

Linnæus places this with the preceding among the *pentandria monogynia*; but he does not allow it to be a diſtinct genus.

Sermountain.

Siler montanum vulgare.

The root is long, thick, and tufted at the top with fibres of decayed leaves.

The ſtalk is five feet high, ſtriated, hollow, and branched.

The leaves are very beautiful: they are of a bright green, large, and compoſed of almoſt innumerable ſmall, oblong, pointed ſegments.

The flowers ſtand in large umbells on the tops of all the branches; and the ſeeds are broad, and of a pale brown.

It is a native of Italy, and flowers in Auguſt.

C. Bauhine calls it *Liguſticum quod ſeſeli officinarum.* Others, *Siler montanum.*

The root is aperient and diuretick. It is excellent againſt the jaundice, and in the beginnings of dropſies.

GENUS XI.

SKIRRET.

SISARUM.

THE flowers are diſpoſed in umbells, on ſpreading ſubdivided branches, and there are ſmall leaves at the baſe of the principal ſtalks and ſubdiviſions. The cup is ſcarce viſible. The flowers are compoſed each of five petals, which turn back. The ſeeds are rounded and ſtriated.

Linnæus places this among the *pentandria* with the preceding.

Common Skirret.

Siſarum vulgare.

The root is compoſed of numerous, oblong, tuberous pieces, browniſh on the outſide, white within, and of a pleaſant flavour.

The ſtalk is ſtriated, firm, branched, and a foot and half high.

The leaves are pinnated; and the pinnæ are oblong, ſerrated, ſharp-pointed, and of a pleaſant green.

The flowers are white; and toward the evening they have a light fragrance.

The ſeeds are ſmall and brown.

It is a native of Spain, and is cultivated in other countries for the root, which is pleaſant and wholeſome.

C. Bauhine calls it *Siſarum Germanicum.*

GENUS XII.

ANISE.

ANISUM.

THE flowers are placed in umbells, on divided and ſubdivided branches; and there are no leaves at the baſe of either. The cup is very ſmall. Each flower is compoſed of five oval petals; and the ſeeds are rounded, and ſtriated on one ſide.

Linnæus places this with the preceding among the *pentandria.*

Common Aniſe.

Aniſum vulgare.

The root is long, ſlender, and white.

The ſtalk is weak, hairy; a foot and half high, but ſcarce erect.

The lower leaves are compoſed of a few broad, ſhort ſegments, ſerrated at the edges, and of a deep green. Thoſe on the upper part of the ſtalk are formed of very narrow ſegments.

The flowers are ſmall and white.

The ſeeds are of a pale olive colour, and of a ſtrong ſmell, and ſweet taſte.

It is a native of the Eaſt, and is ſown in the Levant iſlands for the ſeeds.

C. Bauhine calls it *Aniſum herbariis.* Others, *Aniſum vulgare.*

The ſeeds are an excellent mild carminative, good in cholicks, flatulencies, and indigeſtions.

GENUS XIII.

PARSLEY.

PETROSELINUM.

THE flowers are diſpoſed in ſmall umbells, on divided and ſubdivided branches, and at the baſes of the principal and leſſer diviſions ſtand one or more irregular leaves. The cup is very minute. Each flower is compoſed of five roundiſh petals. The ſeeds are roundiſh, and ſtriated.

Linnæus places this among the *pentandria* with the preceding.

Common Parſley.

Petroſelinum vulgare.

The root is long, ſlender, white, and of an agreeable taſte.

The ſtalk is two feet high, ſtriated, weak, and divided into many branches.

The lower leaves are compoſed of numerous, broad, ſerrated ſegments; and are of a fine green. The upper leaves are narrower in their diviſions.

The flowers are ſmall and yellow, and the ſeeds are of a dark brown.

It

Great Hercules allheal

Black Liburnotis

Common Dill

Broad leaved Thapsia

Narrow leaved Fennell Giant

Broad leaved Fennell Giant

Lasermort

Common Cummin

Masterwort

Lovage

Sermountain

Common Skirret

Common Anise

Common Parsley

Common Bishopweed

Spanish Chervil

Candy Carrot

Upright Hedgeparsley

Black Masterwort

It is a native of Germany, and is cultivated in gardens every where.

Beſide its uſe at the table, the ſeeds are carminative, and good in cholicks. A ſtrong decoction of the roots works ſafely and powerfully by urine; and is excellent in obſtructions of the viſcera.

GENUS XIV.

BISHOPS WEED.

AMMI.

THE flowers are placed in umbells on ſubdivided branches; and at the baſe of the principal, and of the ſubdiviſions both, there ſtand little oblong leaves. The cup is very minute. Each flower is compoſed of five irregular, heart-ſhaped petals; thoſe in the outer part of the tufts having great diſproportion, and thoſe in the middle the petals more equal. The ſeeds are convex, and ſtriated.

Linnæus places this with the preceding among the *pentandria*.

Common Biſhops Weed.

Ammi vulgare.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalk is ſtriated, of a pale green, branched, and three feet high.

The leaves at the bottom are compoſed of numerous, broad, indented pinnæ; and are of a deep green. Thoſe on the upper part are divided into narrower ſegments, and are paler.

The flowers are ſmall and white; and the ſeeds are of a dark brown.

It is a native of the Eaſt, and flowers in July.

C. Bauhine calls it *Ammi majus*. Others, *Ammi vulgare*.

The ſeeds operate by urine, and are alſo good againſt flatulencies.

GENUS XV.

SPANISH TOOTHPICK.

GINGIDIUM.

THE flowers are placed in umbells, on ſubdivided branches; and the whole umbel, which is flat while in flower, grows convex as the ſeeds ripen. Under the principal branches, and their ſubdiviſions, there ſtand numerous little leaves. The cup is very minute. Each flower is compoſed of five petals; of which the outer one is larger than the reſt. The ſeeds are oblong and rough.

Linnæus places this among the *pentandria* with the reſt.

Spaniſh Toothpick.

Gingidium Hiſpanicum.

The root is long and thick.

The ſtalk is two feet high, ſtriated, green, and divided into many branches.

The leaves are large, and of a fine bright green: they are divided and ſubdivided into minute, narrow ſegments.

The flowers form large umbells; but they are ſeparately ſmall and white.

The ſeeds are brown, and of a very pleaſing ſmell.

It is a native of Spain, and flowers in Auguſt.

C. Bauhine calls it *Gingidium umbella longa*. Others, *Viſnaga*.

The rays of the umbel, when the ſeeds are picked off, make an excellent kind of toothpicks: they are fine, tough, of a rough ſurface, and ſweet-ſcented. We ſometimes import them for that purpoſe.

GENUS XVI.

CANDY DAUCUS.

DAUCUS CRETICUS.

THE flowers are placed in umbells, on ſubdivided branches; and at the baſes of the principal branches, and of their ſubdiviſions, there ſtand ſeveral little leaves. The cup is very ſmall. The flowers are compoſed of five heart-ſhaped petals, which are bent; and the outer one is largeſt. The ſeeds are long and hairy.

Linnæus ranges this with the other umbelliferous plants among the *pentandria*; each flower having five filaments.

Candy Daucus.

Daucus Creticus.

The root is long, ſmall, and hung with a few fibres.

The ſtalks are weak, ſlender, ſtriated, and a foot high.

The leaves at the bottom are divided into numerous, narrow ſegments; and they are of a greyiſh green colour. thoſe on the upper part of the plant are cut into longer and yet ſlenderer parts.

The flowers are ſmall and white; and the ſeeds are oblong, rough, and brown.

It is a native of the Eaſt, and flowers in July.

C. Bauhine calls it *Daucus Alpinus multifido folio*. Others, *Daucus Cretenſis*.

The ſeeds are carminative and diuretick.

GENUS XVII.

UMBELLIFEROUS PELLITORY.

PYRETHRUM UMBELLIFERUM.

THE flowers are placed in umbells on ſubdivided branches; and there are no leaves, either at the baſes of the principal or leſſer diviſions. The cup is very minute. Each flower is compoſed of five oblong petals. The ſeeds are oblong, and lightly ſtriated.

Linnæus places this among the *pentandria* with the preceding.

Umbelliferous Pellitory.

Pyrethrum umbelliferum.

The root is long, ſlender, and hung with a few fibres: it is of a brown colour, and a very acrid taſte.

The ſtalk is ſtriated, and three feet high; divided into numerous branches, and of a pale green.

The leaves are very beautifully formed of minute, oblong ſegments; and are of a ſhining green.

The flowers are ſmall and white, and the ſeeds are brown.

It is a native of the Eaſt, and ſome of the warmer parts of Europe, and flowers in July.

C. Bauhine calls it *Pyrethrum umbelliferum:* a name moſt others have copied.

The root held in the mouth is good againſt the toothach, as that of the right *pellitory* of Spain.

GENUS XVIII.

BLACK MASTERWORT.

ASTRANTIA.

THE flowers are placed in ſmall umbells, upon a few principal branches, with numerous ſubdiviſions; and at the baſe of each ſtand ſeveral little leaves. The cup is divided by five dents at the edge. Each flower is compoſed of five oblong petals, ſplit at the top. The ſeeds are oblong, and covered with a kind of cruſt.

Linnæus places this with the reſt of the umbelliferous plants among the *pentandria*, the flowers in all having five filaments.

Black Maſterwort.

Aſtrantia.

The root is black, and compoſed of numerous fibres.

The firſt leaves are placed on long, rediſh footſtalks; and are divided to the baſe into five parts: theſe are oblong, ſerrated, ſharp-pointed; and of a deep green on the upper ſide, and a yellowiſh green underneath.

The ſtalks are numerous, ſtriated, weak, and two feet high.

The leaves on theſe reſemble thoſe from the root; but they are ſmaller, and have fewer diviſions, and thoſe placed leſs regularly.

The flowers terminate the branches in ſmall umbells; which are ſurrounded at the baſe by a peculiar kind of leaves, forming a general cup; and theſe are rediſh within.

The flowers themſelves are of a greeniſh white. The ſeeds are ſmall and brown.

The whole plant has an aromatick taſte.

It is a native of the mountainous parts of Europe, and flowers in June.

C. Bauhine calls it *Helleborus niger ſaniculæ folio major*. Others, *Aſtrantia nigra*.

The root is a violent purge.

The END of the TWENTY-FOURTH CLASS.

THE

THE

BRITISH HERBAL.

CLASS XXV.

Plants whoſe flower is compoſed of numerous floſcules, placed within a common cup, and forming a kind of head; each floſcule being tubular, and the cup formed of numerous ſcaly parts.

THERE is not in the whole compaſs of Nature a claſs more obviouſly or more diſtinctly characteriſed than this. The head ſhews itſelf to the moſt ſlight obſerver as diſtinct from what is ſeen in all other kinds: and it is univerſal in theſe.

From this Mr. Ray was induced to range them in one genus, under the name of *capitatæ*; and ſo conformable to herſelf is Nature, even in the leaſt points, that the Linnæan ſyſtem, eſtabliſhed upon the threads in the flower, does not ſeparate them.

That author places them in his claſs of *ſyngeneſia*; the character of which is, that the buttons at the ſummit of the threads coaleſce, and form a cylinder. All the capitate plants have this peculiar character: but though it ſerves to keep them together, it does not anſwer the ſecond purpoſe of the diſtinctions in ſcience, which is, to ſeparate all others from them; for the other *compoſite-flowered* plants, the *ſow-thiſtle*, and ſuch others, having their buttons coaleſcent in the ſame form, are united by that character with the capitate plants.

Thus Linnæus has therefore of neceſſity, according to his method, arranged them: the *thiſtles* and *coltsfoot* ſtand in the ſame claſs; and are united under it with the *violet* and *balſam*.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this country.

GENUS I.

GENTLE THISTLE.

CIRSIUM.

THE general cup is formed of many ſcales, and ſwells out in the middle. The flowers in this are numerous; and each is formed of a ſingle petal, of a tubular ſhape, very narrow at the baſe, and wide at the mouth, where it is divided into five ſegments. The ſeeds are oblong, and winged with down; and the leaves of the plant are ſet with very ſlight, weak prickles.

Linnæus places this among the *ſyngeneſia*; the filaments converging, and the buttons being united in a cylindrick form.

1. Engliſh Gentle Thiſtle.

Cirſium Anglicum.

The root is compoſed of numerous, ſpreading fibres.

The ſtalk is upright, firm, not much branched, and two feet high.

The leaves are long and narrow: they are of a pale green, covered lightly with a greyiſh, hoary matter, and at the edges beſet with numerous, ſlight prickles.

The flowers grow at the tops of the ſtalks; and they are large and purple.

It is found on marſhy ground in many parts of England, and flowers in June.

C. Bauhine calls it *Cirſium majus ſingulari capitulo.*

The leaves are ſometimes divided ſlightly at the edges; and the flower is not unfrequently white.

2. Great Gentle Thiſtle.

Cirſium majus nutante flore.

The root is fibrous, and white.

The ſtalk is firm, upright, whitiſh, and five feet high: it is rarely much branched, and toward the top it uſually bends with the weight of the flower.

The leaves are very large, oblong, broad, woolly and whitiſh on the upper ſide, and quite white underneath.

The flowers are large and purple: uſually there is only one at the extremity of the ſtalk.

It is found in mountainous damp places, but is not common.

C. Bauhine calls it *Cirſium ſingulari capitulo ſquammato.* Others, *Cirſium Britanicum repens.*

The flower in this alſo is ſometimes white.

3. Blue Mountain Cirſium.

Cirſium humile polyanthemum flore cæruleſcente.

The root is compoſed of thick, white fibres.

The ſtalk is upright, tough, whitiſh, and two feet high.

The leaves are oblong, broad, and of a pale green: they are li[redacted]owny on the ſurface, and edged with fiv[redacted]prickles.

The flowers termina[redacted]the tops of the branches in cluſters; and they are large, and of a bluiſh purple.

The ſeeds are large and brown.

It is not uncommon in Wales, and flowers in July.

Ray calls it *Cirſium humile montanum cynogloſſi folio polyanthemum.* Merret, *Carduus mollis cæruleo flore.*

4. Dentated Cirſium.

Cirſium foliis anguſtis dentatis.

The root is long and ſlender.

The ſtalk is weak, tough, divided into a few branches, and two feet high.

The leaves are long, and very narrow; of a greyiſh green, and ſerrated at the edges.

The flowers are ſmall and numerous, and are of a bright purple.

Ray calls this *Cirſium montanum polyanthemum ſalicis folio.* He thought it but a variety of the former: but I have both the plants, and they are certainly diſtinct.

GENUS II.

THISTLE.

CARDUUS.

THE flowers are placed in great numbers in a common cup. This is compoſed of many ſcaly ſubſtances, pointed at the ends; and it ſwells out in a rounded form. Each flower is formed of a ſingle petal; and is tubular, and ſmall at the bottom, and ſpread out broad at the top; where it is divided into five ſegments, one more deeply ſeparated than the others. The ſeeds are winged with down. The leaves are beſet with ſtrong and ſharp petals, and in many ſpecies alſo the ſtalks.

DIVISION I. BRITISH SPECIES.

1. Common Way Thiſtle.

Carduus vulgatiſſimus.

The root is white and creeping.

The ſtalks are numerous, tough, of a pale green, ſmooth, not much branched, and a yard high.

The leaves are numerous, long, moderately broad, and of a ſtrong green: they are deeply and irregularly notched and ſinuated at the edges, and beſet with long and ſharp prickles.

The flowers terminate the branches in numerous ſmall heads; and are of a pale purple.

It is common in fields and under hedges. It flowers in June.

C. Bauhine calls it *Carduus repens folio ſonchi.*

2. Muſk-Thiſtle.

Carduus moſchatus capitulo nutante.

The root is long, thick, and furniſhed with many fibres.

The ſtalk is firm, upright, of a browniſh colour, and five feet high.

The leaves are numerous, large, and divided at the edges: they are of a duſky green, and beſet with ſharp prickles.

The flower is large and purple; and frequently there is but one at the extremity of the ſtalk, which hangs drooping.

It is very common in damp paſtures, and flowers in June.

J. Bauhine calls it *Carduus nutans.* C. Bauhine, *Cirſium majus ſingulari capitulo magno.*

3. Thiſtle

3. Thiſtle upon Thiſtle.

Carduus caule criſpo.

The root is fibrous and white.

The ſtalks are numerous, tough, upright, branched, and edged with very ſharp prickles.

The leaves are long, narrow, of a deep green, divided at the edges, and very prickly.

The flowers ſtand at the tops of the branches in numerous ſmall heads; and they are of a pale red.

It is common under [illegible]s, and flowers in July.

C. Bauhine calls it *C[illegible]us ſpinoſiſſimus anguſtifolius vulgaris.*

4. Welted Thiſtle, with ſmall flowers.

Carduus ſpinoſiſſimus floribus minoribus.

The root is long, thick, and furniſhed with many fibres.

The ſtalk is three feet high, edged at the ſeveral ſides with prickly membranes from the baſes of the leaves, and of a duſky green.

The leaves are oblong, conſiderably broad, dentated and ſinuated at the edges, and very prickly.

The flowers are placed in ſmall heads at the tops of the ſtalks, and in the boſoms of the upper leaves, and they are of a pale red.

It is found on ditch-banks in loamy ſoils, and flowers in Auguſt.

C. Bauhine calls it *Carduus acanthoides.* Petiver, *Carduus ſpinoſiſſimus capitulis minoribus.*

5. Marſh-Thiſtle.

Carduus paluſtris.

The root is compoſed of numerous, tough, brown fibres.

The ſtalk is upright, not much branched, and ſeven feet high: it is uſually of a browniſh colour, with a tinge of purple, and is very prickly.

The leaves are long, and moderately broad, of a deep green, and ſet with thorns.

The flowers ſtand at the tops of the ſtalk, ſix or eight together; and they are of a deep purple.

It is frequent in meadows, and flowers in June.

C. Bauhine calls it *Carduus paluſtris.* Others, *Carduus aquaticus.*

6. Marſh-Thiſtle, with a ſingle head.

Carduus paluſtris ſingulari capitulo.

The root is formed of numerous, thick, white fibres.

The ſtalk is upright, rediſh, very prickly, not much branched, and four feet high.

The leaves are very large, broad, oblong, and moderately prickly.

The flower uſually ſtands ſingle at the ſummit of the ſtalk: it is a large prickly head, containing numerous floſcules of a very bright purple.

It is found in our fen countries, and flowers in July.

Plukenet calls it *Carduus paluſtris mitior bardanæ capitulo in ſummo caule ſingulari.*

The flower is ſometimes white.

7. Dwarf Carline Thiſtle.

Carlina humilis.

The root is long and thick, and has many fibres.

The leaves lie ſpread upon the ground; and they are long and large, very deeply and irregularly divided at the edges, and ſet with ſtrong, ſharp prickles.

The flower is large, and of a fine purple: it ſcarce riſes from the ground, but grows in the centre of the leaves upon a very ſhort ſtalk.

It is common in dry paſtures in many of our ſouthern counties, and flowers in July.

C. Bauhine calls it *Carlina acaulis flore minore purpureo.* Others, *Carlina acaulis ſeptentrionalium.*

8. Spear-Thiſtle.

Carduus lanceatus.

The root is long, and hung with many fibres.

The ſtalk is upright, ſix feet high, very prickly, and divided into numerous branches.

The leaves are long and large: their colour is a pale green; and they are divided deeply at the edges into pointed ſegments; and at the ends are formed in the ſame manner, reſembling the point of a ſpear.

The flowers grow at the tops of the branches; and are large and purple.

It is common in waſte places, and flowers in July.

C. Bauhine calls it *Carduus lanceatus latifolius.*

9. Small Spear-Thiſtle.

Carduus lanceatus minor.

The root is compoſed of numerous fibres.

The ſtalk is upright, divided into many branches, and four feet high: its colour is a greyiſh green, and it is very prickly.

The leaves are long, and narrow: they are deeply divided into ſharp ſegments; and they run out into a long point at the end.

The flowers are ſmall, and of a pale red; and they ſtand in great cluſters at the extremities of the branches.

It is common by way-ſides, and flowers in Auguſt.

Ray calls it *Carduus lanceatus flore et capite minoribus.*

10. Giant-Thiſtle.

Carduus lanceatus maximus.

The root is compoſed of numerous fibres, connected to a large head.

The ſtalk is upright, firm, very prickly, not much branched, and eight feet high.

The leaves are very large, long, conſiderably broad, of a fine deep green, and divided in the ſpear-pointed manner at the ſides and ends.

The flowers are few in number; but they are very large: they ſtand at the tops of the branches, and are of a fine purple.

It is common in our northern counties, and flowers in July.

Ray calls it *Carduus lanceatus major.*

11. Woolly-headed Thiſtle.

Carduus tomentoſus.

The root is fibrous.

The ſtalk is thick, upright, branched, and five feet high.

The leaves are long, and moderately broad; and they are very beautifully divided; ſomewhat in the manner of the *ſpear-thiſtles*, but with more numerous and more regular ſegments. Their colour is a deep green.

The flowers grow at the tops of the branches in large woolly heads; and they are of a fine deep purple.

We have it in our weſtern counties, but not common. It flowers in Auguſt.

C. Bauhine calls it *Carduus capite rotundo tomentoſo*. Others, *Carduus eriocephalus*, and *Corona fratrum*.

12. Lady's Thiſtle.

Carduus Mariæ.

This is a ſtately and very beautiful plant; and, if brought from a remote part of the world, would be eſteemed in gardens.

The root is long, and furniſhed with numerous fibres.

The ſtalk is upright, firm, regularly branched, and five feet high.

The leaves are very large, long, broad, irregularly notched at the edge, of a deep, fine green colour, and veined and variegated with white.

The flowers are very large and purple, and the heads are prickly.

It is common in waſte places, and flowers in July.

C. Bauhine calls it *Carduus albis maculis notatus vulgaris*. Others, *Carduus lacteus*.

13. Hairy Lady's Thiſtle.

Carduus Mariæ hirſutus.

The root is fibrous and white.

The ſtalk is upright, prickly, firm, not much branched, and four feet high.

The leaves are very large, long, broad, dentated, and ſinuated at the edges, of a pale green, ſomewhat hairy, and not at all variegated with white: they are ſet with ſharp prickles, and cover the ſtalk very thick.

The flowers grow at the tops of the branches in large heads; and are of a pale red.

It is not unfrequent in waſte grounds, and flowers in July.

Ray calls it *Carduus Mariæ hirſutus non maculatus*.

14. Cotton-Thiſtle.

Carduus tomentoſus acanthium dictus.

The root is long, white, and hung with many fibres.

The firſt leaves are extremely broad, ſlightly indented, ſharp pointed, of a whitiſh green, covered with a cottony matter, and ſet round with prickles.

The ſtalk is five feet high, edged with prickly membranes, and ſet thick with the ſame kind of leaves.

The flowers ſtand in very large heads; and are of a bright red, with a tinge of purple.

It is common on ditch-banks, and flowers in July.

C. Bauhine calls it *Spina alba tomentoſa latifolia ſylveſtris*. Other[illegible] *acanthium*.

15. Common Star-Thiſtle.

Carduus ſtellaris calcitrapa dictus.

The root is long, ſlender, and hung with a few fibres.

The firſt leaves ſpread circularly upon the ground; and they are long, narrow, and dented at the edges.

The ſtalk is two feet high; and is of a pale green, and prickly.

The leaves on it reſemble thoſe from the root; but they are more deeply divided, and their colour is a pale green.

The flowers ſtand at the tops of the branches; and are large, and of a faint red, ſometimes white.

The heads of the flowers are armed with prickles, which ſpread out like the rays of a ſtar.

We have it in dry paſtures, but not common. It flowers in July.

C. Bauhine calls it *Carduus ſtellatus foliis papaveris erratici*. Others, *Carduus ſtellaris*, and *Calcitrapa*.

16. Solſtitial Thiſtle.

Carduus ſtellatus luteus.

The root is long, ſlender, black, and hung with a few fibres.

The firſt leaves ſpread circularly on the ground; and they are long, deeply divided, and of a faint green.

The ſtalk is tough, firm, upright, and two feet high.

The leaves on it reſemble thoſe from the root; and they are of a faint green.

The flowers ſtand in ſmall prickly heads at the tops of the branches; and they are of a beautiful yellow.

We have it in dry paſtures in ſome parts of England; but it is not common. It flowers in June.

C. Bauhine calls it *Carduus ſtellatus luteus foliis Cyani*. Others, *Carduus ſolſtitialis*. And we, *The St. Barnaby's thiſtle*.

The *thiſtles* in general poſſeſs but ſmall medicinal virtues. The young ſhoots are eſculent, and in moſt kinds very well taſted.

DIVISION II. FOREIGN SPECIES.

1. Globe Thiſtle.

Carduus capite ſpherico.

The root is fibrous.

The ſtalk is two feet and a half high, round, tough, glutinous to the touch, and covered with a purpliſh duſt.

The leaves are long, moderately broad, deeply

indented; and of a beautiful green on the upper ſide, and a pale green underneath.

The flowers ſtand at the tops of the ſtalks in round heads; and are of a beautiful blue.

It is a native of Italy, but is common in our gardens.

C. Bauhine calls it *Carduus ſphærocephalus latifolius vulgaris.* Others, *Carduus globoſus.*

2. Bleſſed Thiſtle.

Carduus benedictus.

The root is long and [illegible]er.

The ſtalk is tough, firm, very much branched, and two feet high.

The leaves are long, moderately broad, irregularly ſinuated at the edges, and of a yellowiſh green.

The flowers are yellow; and they are placed in prickly heads, cloſe ſurrounded with ſeveral little leaves.

It is a native of the German mountains, and flowers in Auguſt.

C. Bauhine calls it *Cnicus ſylveſtris hirſutior.* Others, *Carduus benedictus.*

It is celebrated as a ſtomachick and ſudorifick, but is not ſo much regarded in the modern practice as thoſe encomiums beſtowed on it by authors ſeem to demand.

GENUS III.

SAFF-FLOWER.

CARTHAMUS.

THE flowers are diſpoſed in numbers in ſcaly heads; the ſeveral ſcales having a kind of foliaceous appendage at the end. Each ſeparate flower is formed of a ſingle petal, and is tubular at the baſe, and divided into five ſegments at the edge. The ſeeds are large, and ſtand almoſt naked.

Linnæus places this with the other capitate plants among the *ſyngeneſia*; their buttons coaleſcing.

Common Saff flower.

Carthamus vulgaris.

The root is long, ſlender, whitiſh, and hung with a few fibres.

The ſtalk is upright, not much branched, round, and rediſh at the bottom.

The leaves are broad, ſhort, ſharp-pointed, and of a lively green: they ſtand irregularly on the ſtalks.

The flowers grow at the ſummits of the ſtalks and branches in large ſcaly heads; and they are of a beautiful orange yellow, which they retain when dry.

It is found by road-ſides in ſome few parts of England. Probably theſe ſhoots have riſen from ſcattered ſeeds, the plant having been cultivated in the neighbourhood for the uſe of dyers: though perhaps it may be native.

It flowers in Auguſt.

C. Bauhine calls it *Cnicus ſativus.* Others, *Carthamus.*

GENUS IV.

SAW-WORT.

SERRATULA.

THE flowers are collected in ſmall heads, and contained in a common cup; which is oblong, rounded, a little ſwelled, and formed of ſcales cloſe ſet, but not prickly. Each floſcule is formed of a ſingle petal, tubular, and crooked at the baſe, and ſwelled out, and divided into five ſegments at the rim. The leaves are not prickly.

Common Saw-wort.

Serratula vulgaris.

The root is fibrous and white.

The firſt leaves are uſually undivided, oblong, broad, and of a beautiful green: ſometimes they are deeply cut in a pinnated form; and they in the ſame manner vary upon the ſtalks, being in ſome plants undivided, and in others very deeply jagged, while the ſpecies is the ſame. In both forms they are very regularly and beautifully notched at the edges; whence the plant had its name.

The ſtalk is round, upright, ſlender, and two feet or more in height.

The flowers are collected in ſmall heads; and are of a fine purple, but ſometimes white.

The ſeeds are oblong and large.

It is common about woods, and flowers in Auguſt.

C. Bauhine calls it *Serratula.* Others, *Serratula purpurea.*

It is accounted vulnerary and aſtringent, but not uſed.

GENUS

GENUS V.

BURDOCK.

LAPPA.

THE flowers are collected in large, rounded heads, and are contained many in a common cup; which is formed of oblong ſcales, whoſe points turn downwards as ſo many hooks. Each flower has a long, ſlender tube, and is divided into five ſegments at the rim. The ſeeds are pyramidal, and winged with ſhort down.

Linnæus places this with the preceding among the *ſyngeneſia:* but he takes away the received name *lappa*, and calls the genus *arctium.*

1. Great Burdock.

Lappa vulgaris major.

The root is long and thick, brown on the outſide, white within, and hung with a few fibres.

The ſtalk is a yard high, ſtriated, tough, and divided into many branches.

The leaves are extremely large: they are broad at the baſe, ſmaller to the point, and of a greyiſh green colour.

The flowers are of a faint purple.

It is common every where in waſte grounds, and flowers all ſummer.

C. Bauhine calls it *Lappa major acrium Dioſcoridis.* Others, *Lappa*, and *Bordana major.*

The root is an excellent diuretick and deobſtruent. The beſt way of giving it is in a ſtrong infuſion; and it is thus very ſerviceable in obſtructions of urine, and in the jaundice. It is alſo much celebrated in aſthmas. The ſeeds poſſeſs the ſame virtues.

2. Smooth-headed Burdock.

Lappa capitulis maximis glabris.

The root is long, thick, brown, and full of a ſlimy juice.

The ſtalk is red toward the bottom, very tough, divided into many branches, and five feet high.

The leaves are of a vaſt ſize, and of a deep green.

The flowers are of a fine red; and the heads in which they are contained are very large and ſmooth.

It is frequent by way-ſides with the other, and flowers in Auguſt.

Ray calls it *Lappa major capitulo maximo glabro.*

3. Small-headed Burdock.

Lappa major capitulis minoribus.

The root is long, thick, and of a pale colour.

The ſtalk is tough, ſtriated, and very much branched.

The leaves are large, oblong, and not ſo broad as in the common ſpecies.

The heads are ſmooth, ſmall, and very numerous: they are of a conic figure, and have tufts of purple flowers.

It is common in our ſouthern counties, and flowers in July.

Ray calls it *Lappa major capitulis parvis glabris.*

4. Woolly-headed Burdock.

Lappa capitulis magnis tomentoſis.

The root is long, thick, and brown.

The ſtalk is very thick, ſtriated, purpliſh, and five feet high: it is divided into many branches, and thick ſet with leaves.

Theſe are broad, ſhort, rough, of a grey green, and of an uneven ſurface.

The flowers ſtand at the tops in vaſt roundiſh, woolly heads.

The ſeeds are large and brown.

It is common in our waſte grounds, and flowers in June.

Ray calls it *Lappa major capitulis tomentoſis.* Others, *Bardana major capitulis lanuginoſis.*

5. Globular-headed Burdock.

Lappa capitulis minoribus globoſis.

The root is long and large.

The ſtalk is tough, firm, upright, and four feet high; and it is divided into many branches, and thick ſet with leaves.

Theſe are very large, broad, rumpled, of a duſky green, and clammy.

The flowers are of a pale red, ſometimes white; and they are collected into little, globular heads; which are thick ſet with a woolly matter.

We have it in our northern counties, where it flowers in May.

Ray calls it *Lappa major montana capitulis minoribus rotundioribus et magis tomentoſis.*

6. Little Cobweb-headed Burdock.

Lappa minor capitulis reticulatis.

The root is very long and brown.

The ſtalk is lightly ribbed, and of a rediſh colour.

The leaves are large, and have brown foot-ſtalks: they are of an uneven ſurface, and pale green.

The flowers are little and purple; and they are collected into ſmall olive-coloured heads, elegantly reticulated with a white, woolly matter.

Petiver calls it *Bordana minor capitulo araneoſo.*



English Gentle Thistle



Common wayside Thistle



Dwarf Carline



Spear Thistle



Woolly headed Thistle



Ladies Thistle



Cotton Thistle



Common Stare Thistle



Solstitial Thistle



Globe Thistle



Blessed Thistle



Daff Flower



Carmont



Great Burdock



Common Blue Sowthistle



Common Knapweed



Great Knapweed



Great Centaury

GENUS VI.

BLUEBOTTLE.

CYANUS.

THE flowers are arranged many together in a ſmall head. The common cup ſurrounding them is of a rounded figure; and is compoſed of oblong ſcales, edged in an elegant manner. The floſcules or ſeparate flowers are large: they have a long and ſlender tube, and a wide mouth, ſwelled out and divided into five ſegments; and the floſcules on the verge of each head are leſs divided than thoſe in the centre. The leaves are not prickly, and the whole flower is elegant.

Linnæus places this among the *ſyngeneſia*.

DIVISION I. BRITISH SPECIES.

Common Bluebottle.

Cyanus vulgaris.

The root is fibrous, and whitiſh.

The ſtalk is upright, ſlender, firm, ribbed, of a pale green, and covered more or leſs with a whitiſh, downy ſubſtance.

The leaves are long and narrow: thoſe on the lower parts are divided deeply in a ſomewhat pinnated manner. The others are entire: they are of a pale green, and of a firm ſubſtance.

The flowers terminate the tops of the branches; and they are large, and of a fine blue.

It is common in corn-fields, and flowers in Auguſt.

C. Bauhine calls it *Cyanus ſegetum*. Others, *Cyanus minor*.

DIVISION II. FOREIGN SPECIES.

Great Bluebottle.

Cyanus major.

The root is compoſed of innumerable thick fibres.

The ſtalks are round, thick, a foot and half high, and not much branched: they are of a freſh green colour; but they have a white cottony matter about them.

The leaves are large, oblong, undivided, and of a fine green.

The flowers are large and beautiful: they are naturally purple; but ſometimes blue, and ſometimes white.

It is a native of Italy, and flowers in Auguſt.

C. Bauhine calls it *Cyanus montanus latifolius ſive verbaſculum cyanoides*.

GENUS VII.

KNAPWEED.

JACEA.

THE flowers are collected into large, rounded heads; and the ſcales compoſing theſe are edged with ſlender and irregular fibres. The flowers themſelves are ſmall: they have a very narrow, tubular baſe; and an open mouth, divided deeply into five ſegments; which are long, narrow, and pointed.

Linnæus places this with the *cyanus* among the *ſyngeneſia*. He does not allow either to be a diſtinct genus, but compriſes them together with the *great centaury* under the name *centaurea*.

1. Common Knapweed.

Jacea vulgaris.

The root is compoſed of numerous, tough, brown fibres.

The ſtalk is upright, firm, of a brown colour, not much branched, and a foot and half high.

The leaves are oblong, and of a duſky green; they are variouſly and irregularly nicked and divided at the edges.

The flowers terminate the branches; and they are of a fine, purpliſh red.

The ſeeds are ſmall and brown.

It is common in paſtures, and by way-ſides, and flowers in June.

C. Bauhine calls it *Jacea nigra pratenſis latifolia*. Others, *Jacea vulgaris*.

It is an excellent aſtringent, and is beſt given in decoction.

2. Great Knapweed.

Jacea major.

The root is compoſed of innumerable thick long, and brown fibres.

The ſtalk is robuſt, brown, two feet and a half in height, and variouſly and irregularly branched.

The leaves are large; and ſome of them are entire, others divided to the rib into many ſegments.

The flowers ſtand at the tops of the branches; and they are large, and of a lively purple.

The ſeeds are large and brown.

It is common in hilly paſtures, and flowers in July.

C. Bauhine calls it *Jacea major ſquammatis capitulis.*

3. Grey Matweed.

Jacea foliis cinereis.

The root is compoſed of many ſlender fibres.

The ſtalk is upright, brown, but covered with a cottony matter, not much branched, and rarely above ten inches high.

The leaves are oblong and narrow, of a greyiſh green, and cottony. Thoſe toward the lower part are deeply divided, the others ſcarce at all.

The flowers are large, and of a pale fleſh-colour.

It is found in our northern counties, and flowers in July.

Ray calls it *Jacea minor tomentoſa laciniata*; but the upper leaves uſually are undivided.

SERIES II.

FOREIGN GENERA.

Thoſe of which there is no ſpecies native of this country.

GENUS I.

GREAT CENTAURY.

CENTAURIA.

THE flowers are collected into oblong heads; which are compoſed of numerous, thick, cluſtered ſcales: they are each formed of a ſingle petal, which has a very ſlender, tubular baſe; and is deeply divided into five ſegments.

Linnæus places this with the reſt of the capitate plants among the *ſyngeneſia*, their buttons in the flower coaleſcing in a cylindric form. The common name of the genus is *centaurium majus:* but that is an irregular term. It is better therefore to follow the modern practice, and call it *centauria.*

Common Great Centaury.

Centauria vulgaris.

The root is long, thick, and of a rediſh colour.

The ſtalk is firm, upright, of a brown colour, four or five feet high, and divided into many branches.

The leaves are very large, and pinnated in a regular and handſome manner: they are ſerrated along the edges of the pinnæ, and of a yellowiſh green.

The flowers terminate the branches; and are large and purple.

The ſeeds are oblong and gloſſy.

It is a native of Italy, and flowers in June.

C. Bauhine calls it *Centaurium majus folio in plures lacinias diviſo.*

The END of the TWENTY-FIFTH CLASS.

THE

THE

BRITISH HERBAL.

CLASS XXVI.

Plants whoſe flower is compoſed of numerous floſcules, or ſmaller diſtinct flowers; which are flat not tubular, to the end; and are arranged together in a ſcaly cup; the whole naturally full or double; the entire number of floſcules forming each general flower being uniform, and regularly diſpoſed; and whoſe leaves and ſtalks yield, on being broken, a white milky juice.

THE firſt glance, even of an unexperienced eye, ſees theſe plants, numerous as they are, to be regularly connected with one another, and evidently divided from thoſe of all the other claſſes: but the preſent mode of ſcience, baniſhing the uſe of obvious characters, and eſtabliſhing its diſtinctions only on the diſpoſition and number of the minuter parts, confounds theſe plants with the capitate or thiſtle kind deſcribed before; and with the corymbiferous, as well as ſimply diſcoide, to be deſcribed hereafter under one general term, the *ſyngeneſia*.

Thus arranged together, they conſtitute the claſs diſtinguiſhed by that term in the Linnæan ſyſtem, and are with the thiſtles ranked alſo with the violet and balſam.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are found naturally wild in this country.

GENUS I.

LETTUCE.

LACTUCA.

THE flower is compoſed of numerous, flat, or ligulated floſcules, notched at the extremity, and arranged together in a ſcaly cup, of an oval or oblong figure, formed of numerous, ſoft, and ſharp pointed ſcales. The ſeeds are winged with down, and the ſtalks of the plant are tolerably firm and ſolid.

Linnæus places this among the *ſyngeneſia*; the filaments, as in the others, having buttons, which unite into a cylinder.

DIVISION I. BRITISH SPECIES.

1. Great Wild Lettuce.

Lactuca ſylveſtris major opii odore.

The root is long, thick, and whitiſh; and, when cut, it yields abundantly a yellow juice, of a very unpleaſant ſmell, reſembling that of opium; and of a bitter and nauſeous taſte.

The firſt leaves are very large, oblong, broad, and a little waved, but not divided at the edges.

Their colour is a pale green; and, when broken, they yield the ſame yellow acrid juice.

The ſtalk is round, green, ſmooth, and five feet high; and at the top it is divided into many branches.

The leaves on it reſemble thoſe from the root; and are oblong, broad, and undivided.

The flowers ſtand at the tops of the branches; and are numerous, ſmall, and yellow.

It is frequent in our midland counties, and flowers in July.

C. Bauhine calls it *Lactuca ſylveſtris odore viroſo.* Others, *Lactuca ſylveſtris major odore opii.*

This is one of thoſe Engliſh plants which deſerve to be more known in medicine. It is called poiſonous, and men have from that been frighted from its uſe; but it is a very gentle and ſafe opiate. The beſt way of giving it is in a ſyrup made from a decoction of the freſh leaves and ſtalk. This way it greatly exceeds the common diacodium, and may be given to tender conſtitutions with more ſafety. This I write from experience.

2. Jagged-leaved Wild Lettuce.

Lactuca ſylveſtris foliis laciniatis.

The root is long, thick, and brown.

The ſtalk is round, thick, upright, purpliſh, and four feet high.

The leaves are long and large, of a dead green, deeply divided at the edges, and prickly along the rib on the under ſide.

The flowers are ſmall, and of a pale yellow: they grow in vaſt numbers on the tops of the branches.

The whole plant abounds with a yellow, ill-ſcented juice.

It is common on ditch-banks, and flowers in June.

C. Bauhine calls it *Lactuca ſylveſtris coſta ſpinoſa.* Others, *Lactuca ſylveſtris diſſectis foliis.*

The leaves of this ſpecies are ſometimes undivided, or very little divided, as in the firſt kind. In this ſtate ſome have deſcribed it as a diſtinct ſpecies; and others have confounded it with this and with the firſt: but they are two diſtinct plants; and this variety only belongs to the latter here deſcribed.

3. The leaſt Wild Lettuce.

Lactuca ſylveſtris minima.

The root is long and thin.

The ſtalks are numerous, very ſlender, tough, and of a purpliſh colour.

The leaves are long, narrow, and deeply divided; and the whole plant is full of an ill-ſcented juice.

The flowers are ſmall; and they rarely open: they are placed in long, ſlender cups.

It is common on clay-banks of ditches, and flowers in Auguſt.

C. Bauhine calls it *Chandrilla viſcoſa humilis.* Others, *Lactuca ſylveſtri minor.*

4. Ivy-leaved Wild Lettuce.

Lactuca murorum foliis anguloſis.

The root is fibrous and whitiſh.

The ſtalk is round, upright, not much branched, browniſh or purpliſh in colour, and two feet high.

The leaves are long, and of a handſome figure: they are ſmall, and deeply pinnated toward the baſe, and at the end they ſwell out into a broad, angulated, and pointed piece, reſembling a leaf of ivy.

The flowers are ſmall, numerous, and yellow.

It is common on banks and walls, and flowers in June.

C. Bauhine calls it *Sonchus levis laciniatus muralis parvis floribus.*

Linnæus diſtinguiſhes this and the ſucceeding from the *lettuce* kind under the name *prenanthes*, from a ſlight difference in the cup.

DIVISION II. FOREIGN SPECIES.

Blue-flowered Mountain-Lettuce.

Lactuca montana cærulea.

The root is long, ſmall, and hung with fibres.

The ſtalk is round, ſlender, upright, of a purpliſh colour, and divided at the top into many branches.

The leaves are long, and moderately broad: they are ſlightly ſinuated at the edges, and of a deep green.

The flowers are ſmall, and of a fine blue.

It is a native of Italy, and flowers in Auguſt.

C. Bauhine calls it *Lactuca montana ſurſurea cærulea major.*

GENUS II.

SOW-THISTLE.

SONCHUS.

THE flower is compoſed of numerous, flat floſcules, ranged together in a large common cup. This is rounded, and formed of very numerous and very ſlender ſcales. Each of the floſcules is narrow, and indented in four parts at the top. The ſeeds are oblong, and the ſtalks thick, but ſlight and hollow. Linnæus places this among the *ſyngeneſia*.

DIVISION I. BRITISH SPECIES.

1. Common ſmooth Sow-Thiſtle.

Sonchus lævis vulgaris.

The root is compoſed of numerous, whitiſh fibres.

The ſtalk is thick, upright, round, hollow, and of a dead green.

The leaves are very large, oblong, deeply ſinuated at the edges, and terminated by a large, broad point.

The flowers ſtand in great numbers on the tops of the branches; and are large, and of a fine pale yellow.

It is common every where in ground that has been dug, and flowers in June.

C. Bauhine calls it *Sonchus lævis laciniatus latifolius*. Others only, *Sonchus lævis*.

2. Broad-leaved ſmooth Sow-Thiſtle.

Sonchus lævis folio latiore.

The root is fibrous and white.

The ſtalk is round, upright, of a deep green, and a yard high.

The leaves are broad and ſhort; and are divided at the edges by a few ſlight ſegments.

The flowers are large, and of a pale yellow.

It is common in corn-fields, and flowers in June.

C. Bauhine calls it *Sonchus lævis minor pauciloribus laciniis*.

3. Common prickly Sow-Thiſtle.

Sonchus foliis ſpinoſis vulgaris.

The root is long and ſlender, and has many fibres.

The ſtalk is very thick, and of a fine deep green, round, a yard high, and branched.

The leaves are long, and conſiderably broad, ſerrated, and prickly at the edges, and of a fine deep green.

The flowers are large, and of a gold yellow.

It is common on ditch-banks, and flowers in Auguſt.

C. Bauhine calls it *Sonchus aſper non laciniatus*. Others, *Sonchus aſper vulgaris*.

4. Jagged prickly Sow-Thiſtle.

Sonchus aſper foliis laciniatis.

The root is long, and hung with many fibres.

The ſtalk is round, thick, branched, and four feet high.

The leaves are very large, and of a faint green, deeply divided at the edges, and very prickly.

The flowers are ſmaller than in the laſt, and of a faint yellow.

It is common on waſte ground, and flowers in July.

C. Bauhine calls it *Sonchus aſper laciniatus*; a name moſt of the ſucceeding writers have copied.

5. Oval-leaved Sow-Thiſtle.

Sonchus foliis ovatis.

The root is a tuft of white fibres.

The ſtalk is ſlender, upright, ſcarce at all branched, and a foot and half high.

The leaves are of a very elegant form and colour: they are of a gloſſy green, ſmall at the baſe, where they ſurround the ſtalk, and oval toward the end; and they are lightly ſet at the edges with tender thorns.

The flowers are few, large, and of a fine gold yellow.

It is found on ſandy banks, flowering in June.

Petiver calls it *Sonchus rotundo folio*. Plukenet, *Sonchus ſubrotundo folio noſtras*.

6. Naked-ſtalked Sow-Thiſtle.

Sonchus caule nudo.

The root is long, ſlender, and hung with many fibres.

The leaves that riſe from it are very numerous, long, narrow, ſharp-pointed, and beſet with tender thorns at the edge.

The ſtalk is a foot and a half high; and often it has no leaves on it, rarely more than one or two: theſe are of the ſame form with thoſe from the root.

The flowers are large, and of a deep yellow.

It is found among corn, and flowers in July.

7. Tree Sow-Thiſtle.

Sonchus arboreſcens.

The root is long and thick.

The ſtalk is upright, round, of a yellowiſh green, not much branched, and beſet with coarſe yellow hairs.

The leaves are long, of a deep green, and divided irregularly at the edges.

The flowers ſtand at the tops of the branches; and are very large, and of a deep orange yellow: they ſtand in dark green cups, covered with coarſe yellow hairs.

It is common in corn-fields and dry paſtures, flowering in Auguſt.

C. Bauhine calls it *Hieracium majus folio ſonchi*. Others, *Sonchus arboreſcens vulgaris*.

8. Great Marſh Tree Sow-Thiſtle.

Sonchis arboreſcens folio cuſpidato.

The root is long and white.

The ſtalk is round, upright, eight feet high, and of a dead green: toward the top it divides into numerous branches.

The leaves are long, conſiderably broad, deeply indented, and pointed at the end.

The flowers are of a gold yellow, numerous, and very large.

It is a native of our marſhes, and flowers in autumn.

Merret calls it *Sonchus tricubitalis folio cuſpidato.*

9. Sharp prickled Sow-Thiſtle.

Sonchus aſper dentatus.

The root is fibrous.

The ſtalk is round, hollow, purpliſh, and two feet high.

The leaves are long, and conſiderably broad: they are dentated ſharply at the edges, and beſet with ſtronger prickles than the others.

The flowers terminate the branches; and are large, and of a gold yellow.

It is found in corn-fields, and flowers in July.

Petiver calls it *Sonchus aſper dentatus.* Dodonæus, *Sonchus aſperior.*

10. Laciniated, ſmooth Sow-Thiſtle.

Sonchus levis laciniatus.

The root is long, ſlender, and hung with many fibres.

The ſtalks are round, hollow, upright, and five feet high.

The leaves are long and large: they are conſiderably broad; and they are divided down to the rib in many ſegments.

The flowers are large, and of a faint yellow.

It is frequent in the weſt of England, and flowers in June.

Petiver calls it *Sonchus levis laceratus*; a name others have copied.

Blue Mountain Sow-Thiſtle.

Sonchus cæruleo flore.

The root is long and thick.

The ſtalk is round, hollow, purpliſh, and of a firm ſubſtance: it is not much branched.

The leaves are large, oblong, ſharp-pointed, deeply and irregularly pinnated, and finely ſerrated along the ſegments.

The flowers are very large, and of a fine ſky-blue.

It is found on the mountains of Italy, and flowers in May.

Petiver calls it *Sonchus cæruleus lævis.* Others, *Sonchus montanus cæruleo flore.*

All the *ſow-thiſtles* poſſeſs the ſame qualities, which are very trifling with regard to medicine. They are cooling, outwardly applied. Some have eaten the young ſhoots; but they are not pleaſant.

DIVISION II. FOREIGN SPECIES.

GENUS III.

HAWKWEED.

HIERACHIUM.

THE flower is compoſed of numerous floſcules, arranged in a ſmall head. The common cup to theſe is oblong; and is formed of numerous, irregular ſcales, lying cloſe on one another. Each floſcule is flat, and dented in five places at the end. The ſtalks of the plant are firm, and the ſeeds oblong and ſlender.

Linnæus places this among the *ſyngeneſia*, the buttons on the threads coaleſcing into a cylinder.

DIVISION I. BRITISH SPECIES.

1. Hawkweed with bitten roots.

Hieracium radice abrupta.

The root is compoſed of numerous, thick fibres, joined to a ſmall, oblong head, which terminates abruptly, and looks as if bitten off.

The ſtalks are numerous, a foot high, branched, and of a pale green.

The leaves are long, narrow, and ſharply divided at the edges.

The flowers are ſmall, and of a full yellow.

It is common in paſtures, and flowers in July.

C. Bauhine calls it *Hieracium chondrillæ folio glabro.*

2. Long-rooted Hawkweed.

Hieracium longius radicatum.

The root is very long, moderately thick, and of a pale brown.

The leaves riſe in a cluſter from this; and they are oblong, moderately broad, and of a deep green: they are obtuſe at the ends, and are irregularly ſinuated at the edges.

The ſtalks riſe among theſe; and are ſlender, tough, branched, a foot and half high, and of a pale green: they have rarely any rudiment of a leaf upon them.

The flowers grow at the tops of the branches, and are of a fine gold yellow.

It is common in paſtures, and flowers in June.

C. Bauhine calls it *Hieracium dentis leonis folio obtuſum majus.*

3. Smooth yellow Hawkweed.

Hieracium luteum glabrum foliis laciniatis.

The root is compoſed of numerous fibres.

The

The ſtalks are upright, branched, and ſpreading, of a pale green, and a foot and half high.

The leaves are oblong, and moderately broad; and they are very deeply jagged at the edges: their colour is a fine green; and they are perfectly ſmooth.

The flowers ſtand at the tops of the ſtalks; and they are ſmall, and of a deep yellow.

It is common in paſtures, and flowers in July.

C. Bauhine calls it *Cichoreum pratenſe luteum lævius.* Others, *Hieracium aphacoides.*

Theſe three ſpecies are very common in our paſtures; and they appear under various forms, according to the degree of nouriſhment each receives. Hence authors, who judged too ſuperficially, have divided them into a number of kinds taller or lower, and with more or leſs jagged leaves: but theſe three are the real ſpecies.

4. Strong-ſcented Hawkweed.

Hieracium caſtorei odore.

The root is compoſed of long, thick fibres.

The ſtalk is upright, branched, and two feet high.

The leaves are long, moderately broad, hairy, deeply indented, and of a pale green.

The flowers are large and yellow; and, before they open, the bud hangs drooping.

We have it on dry banks in our midland counties. It flowers in July.

Ray calls it *Hieracium caſtorei odore Monſpelienſium.*

This ſpecies, when leſs nouriſhed, has the leaves leſs divided, and has in this ſtate been conſidered by ſome as a diſtinct ſpecies.

5. Broad-leaved Mountain Hawkweed.

Hieracium latifolium montanum.

The root is long, ſlender, and furniſhed with many fibres.

The ſtalk is weak, branched, of a deep green.

The leaves are very broad, oblong, hairy, and of a duſky colour.

The flowers are large, and of a pale yellow.

It is common in our northern counties, and flowers in June.

C. Bauhine calls it *Hieracium montanum latifolium glabrum minus.* Cluſius, *Hieracium Britannicum.*

6. Great jagged-leaved Hawkweed.

Hieracium laciniatum majus.

The root is long, ſlender, and furniſhed with a few fibres.

The ſtalk is round, firm, and two feet and half high.

The leaves are long, moderately broad, deeply ſinuated, and rough.

The flowers are large, and of a deep yellow.

It is found on ditch-banks in ſandy ſoils, and flowers in Auguſt.

C. Bauhine calls it *Hieracium maximum chondrillæ folio aſperum.* Others, *Hieracium cichorei folio majus.*

7. Rough-headed Hawkweed.

Hieracium aſperius capitulis foliaſis.

The root is long and ſlender, and has abundance of fibres.

The leaves that riſe from it ſpread circularly upon the ground; and are long, narrow, of a yellowiſh green, and very rough to the touch.

The ſtalks are numerous, branched, and a foot and half high.

The leaves on theſe reſemble thoſe from the root; but they are not altogether ſo rough.

The flowers are large and yellow; and they ſtand in a kind of leafy heads, reſembling thoſe of the *carduus benedictus.*

It is common on ditch banks, and flowers in July.

C. Bauhine calls it *Hieracium echioides capitulis cardui benedicti.* Our people, *Lang de beef.*

8. Dwarf Hawkweed, with ſinuated leaves.

Hieracium pumilum folius ſinuatis.

The root is long and ſlender.

The firſt leaves are long, narrow, ſoft, of a pale green, and ſinuated deeply at the edges.

The ſtalks are numerous, branched, and three inches high; and they are almoſt naked.

The flowers ſtand at the tops, and are ſmall and yellow.

It is frequent in Suſſex on heaths, and flowers in July.

Ray calls it *Hieracium parvum in arenoſis naſcens ſeminum pappis denſicus radiatis.*

9. Great-flowered rough Hawkweed.

Hieracium aſperium flore majore.

The root is long, and hung with many fibres.

The ſtalk is upright, round, hairy, two feet high, branched, and of a brown colour.

The leaves are long, narrow, rough to the touch, and deeply ſinuated.

The flowers are large, and yellow.

We have it in corn-fields, where it flowers in July.

C. Bauhine calls it *Cichorium pratenſe luteum hirſutiem aſperum.* Ray, *Hieracium aſperum majori flore.*

10. Dwarf rough Hawkweed.

Hieracium pumilum aſperum.

The root is compoſed of numerous fibres, connected to an abrupt head.

The leaves are long, narrow, a little ſinuated at the edges, and rough to the touch.

The ſtalks are tough, and eight inches high, and the flowers ſmall and yellow.

It is found on dry banks in Kent, flowering in June.

C. Bauhine calls it *Hieracium pumilum ſaxatile aſperum radice præmorſa.* Columna, *Hieracium ſaxatile montanum.*

11. Great-flowered broad-leaved Hawkweed.

Hieracium latifolium magno flore.

The root is compoſed of numerous fibres.

The

The leaves riſe in a round tuft; and are long, broad, and covered with a downy hairyneſs, of a deep green, and often ſpotted.

The ſtalk is upright, ſlender, firm, and naked: at the top ſtands a ſingle flower, ſometimes two: theſe are large, and of a gold yellow.

We have it in Suſſex, flowering in Auguſt.

C. Bauhine calls it *Hieracium Alpinum latifolium birſutis incanum magno flore.*

12. Broad-leaved, hairy, Buſh Hawkweed.

Hieracium erectum latifolium birſutum.

The root is compoſed of numerous fibres.

The ſtalk is firm, round, a yard high, and at the top branched.

The leaves have long footſtalks; and they are broad, hairy, of a pale green, indented lightly, and ſharp-pointed.

The flowers are numerous, large, and of a pale yellow.

We have it about woods, flowering in July.

C Bauhine calls it *Hieracium fruticoſum latifolium birſutum*; a name others have followed.

13 Short-leaved, buſhy Hawkweed.

Hieracium fruticoſum folio breviore.

The root is fibrous and brown.

The ſtalk is robuſt, upright, branched, and a yard high.

The leaves are broad, ſhort, indented irregularly, and of a fine green: they are covered with a light hairyneſs; but it is ſo ſlight they appear ſmooth to the diſtant ſight.

The flowers are large, numerous, and of a gold yellow.

It is common in our northern counties, flowering in Auguſt.

C. Bauhine calls it *Hieracium fruticoſum latifolium foliis dentatis glabrum.*

14. Narrow-leaved, Buſh Hawkweed.

Hieracium fruticoſum anguſtifolium.

The root is fibrous.

The ſtalk is firm, upright, brown, and a yard high.

The leaves are long, narrow, of a pale green, and indented at the edges.

The flowers are large, and of a fine yellow: they ſtand at the tops of the branches.

It is common in woods, and flowers in Auguſt.

C. Bauhine calls it *Hieracium fruticoſum anguſtifolium majus.*

The leaves of this ſpecies are ſometimes ſcarce at all indented; and, according to the degree of ſhade, they will be more or leſs hairy. Under theſe differences it has been deſcribed by ſome as three diſtinct plants.

15. Golden Lungwort.

Hieracium murorum pilоſiſſimum.

The root is compoſed of numerous, brown fibres.

The ſtalk is round, branched, and two feet high; and it is extremely hairy.

The leaves have long footſtalks; and they are large, oblong, broad, lightly indented, and extremely hairy, like the ſtalk.

The flowers are numerous, and of a bright yellow.

It is frequent on walls, and on dry banks, flowering in Auguſt.

C. Bauhine calls it *Hieracium murorum folio piloſiſſimo.* Others, *Pulmonaria Gallica.*

16. Narrow-leaved golden Lungwort.

Hieracium pulmonaria dictum anguſtiore folio.

The root is fibrous.

The ſtalk is firm, upright, two feet high, and not branched.

The leaves are long, and moderately broad, of a fine green, covered with a white down; and they have long footſtalks.

The flowers are large, and of a delicate yellow.

It is found in woods in our midland counties, flowering in July.

Ray calls it *Hieracium pulmonaria dictum anguſtifolium.*

We have this and the former ſpecies on our cold, northern mountains, where they aſſume a ſomewhat different form. In the firſt ſpecies the leaves are more obtuſe, and leſs hairy; and in this they are ſmaller: in both the ſtalks grow up to a great height, but with few leaves.

Theſe varieties have by ſome been deſcribed as diſtinct ſpecies; but they are no more than accidents of growth.

17. Great ſingle-flowered Mountain Hawkweed

Hieracium flore magno ſingulari.

The root conſiſts of numerous fibres, connected to a ſmall head.

The leaves are ſpread in a rounded cluſter; and are oblong, broad, obtuſe, and hairy.

The ſtalk riſes in the centre: it has no leaves, and it ſupports only a ſingle flower: this is very large, and yellow.

We have it in Wales, and the north of England. It flowers in June.

Ray calls it *Hieracii villoſum Alpinum flore magno ſingulari caule modo.*

It reſembles mouſe ear.

18. Single-flowered Buſh Hawkweed.

Hieracium nemorum flore ſingulari.

The root is long, and is hung with many fibres.

The ſtalk is firm, a foot high, hairy, and of a browniſh colour.

The leaves are numerous, oblong, broad, dented at the edges, of a pale green, and very hairy.

The flower ſtands ſingly on the top of the ſtalk; and is very large, and of a gold yellow.

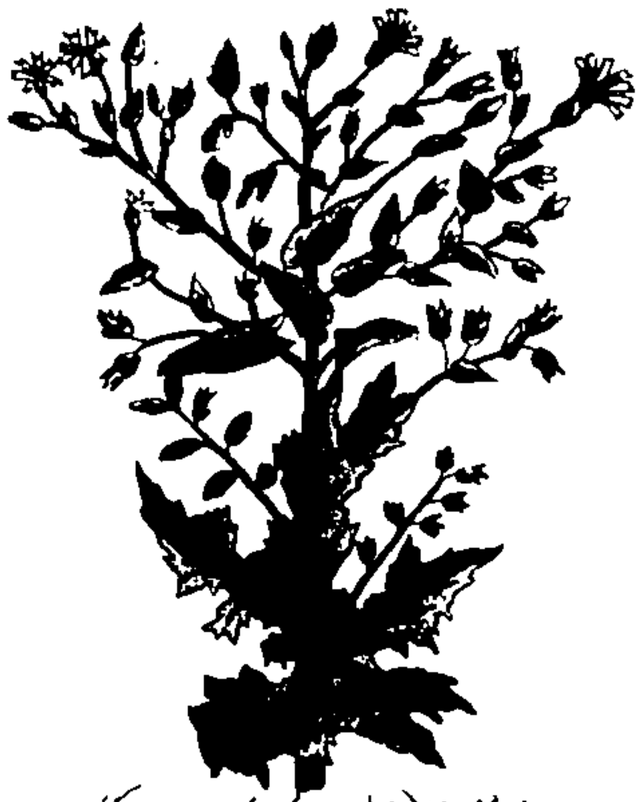
We have it in woods, flowering in July.

Ray calls it *Hieracii ſeu piloſellæ majoris ſpecies humilis foliis longioribus rarius dentatis plurimus ſimul flore ſingulari.*

When



Great Wild Lettuce



Jagged leaved Wild Lettuce



Ivy leaved Wild Lettuce



Blue flowered Mountain Lettuce



Common smooth Sowthistle



Common prickly Sowthistle



Round leaved Sowthistle



Great Marsh or Sowthistle



Blue Mountain Sowthistle



Hawkweed with bitten roots



Long rooted Hawkweed



Smooth yellow Hawkweed



Narrow leaved bushy Hawkweed



Golden Langwort



Narrow leaved Golden Langwort



Single flowered Hawkweed



Red flowered Hawkweed

When this grows in a leſs ſhaded ſituation, the leaves are few, and deeper cut; and there are ſometimes more flowers than one; and, where much expoſed to cold, the leaves will be crumpled, an dſmaller. In both theſe ſtates we find it in our northern counties; and it has been deſcribed as ſo many diſtinct ſpecies, in theſe appearances.

DIVISION II. FOREIGN SPECIES.

Red-flowered Hawkweed.

Hieracium flore rubente.

The root is long, and hung with many fibres.

The leaves riſing from it are numerous, broad, hairy, and of a dark green.

The ſtalk is a foot high, round, and very hairy: at the top grow numerous footſtalks, ſupporting the flowers.

Theſe are moderately large, and of a deep orange ſcarlet.

It is a native of Spain, and flowers in Auguſt.

C. Bauhine calls it *Hieracium hortenſe floribus atro purpuraſcentibus.* Our people, *Grim the collier.*

All the *hawkweeds* are of the ſame general qualities, cooling and deobſtruent; but their virtues are not ſufficient to bring them into eſteem or practice.

GENUS IV.

MOUSE-EAR.

PILOSELLA.

THE flower is compoſed of numerous floſcules, contained in a rounded cup, formed of numerous, tender, oblong, and narrow ſcales. The floſcules are ſeparately flat; and dented in five parts at the ends. The leaves are hairy; and there ſtands only one head or general flower on the top of each ſtalk.

Common Creeping Mouſe-Ear.

Piloſella vulgaris repens.

The root is a tuft of whitiſh fibres.

The leaves riſe in a little cluſter from this; and they are oblong, narrow, of a deep green, and very hairy: there riſe with theſe ſome long, weak, trailing ſhoots, which take root at the ends; and theſe ſending up other cluſters of leaves, propagate the plant abundantly.

The ſtalk is ſlender, of a pale green, hairy, and four inches high.

One flower ſtands on its top; and this is large, and of a very beautiful pale yellow.

It is common on dry banks, flowering in May.

C. Bauhine calls it *Piloſella major repens hirſuta.* Others only, *Piloſella.*

It is an excellent aſtringent; and may be given in powder of the whole plant againſt hæmorrhages, and overflowings of the menſes.

A ſtrong decoction of it is good againſt looſeneſſes attended with bloody ſtools.

GENUS V.

DANDELION.

DENS LEONIS.

THE flower is compoſed of numerous floſcules, arranged in a common cup, compoſed of many ſcales, the inner ones of which are long, narrow, and ſtrait; and the outer, fewer, broader, and naturally turned backwards at the end. Each floſcule is narrow, and dented in five places at the end; and one flower ſtands on each ſtalk; which is alſo naked, or without leaves.

Linnæus places this among the *ſyngeneſia* with the others.

1. Common Dandelion.

Dens leonis vulgaris.

This is almoſt too common for deſcription.

The root is long, and has many fibres.

The leaves are numerous, long, broad, of a fine green, deeply indented, and full of a milky juice.

The ſtalks are numerous, hollow, naked, and ten inches high.

One flower ſtands on the top of each; and this is large and yellow.

It is common by way-ſides, and flowers all ſummer.

C. Bauhine calls it *Dens leonis latiore folio.* Others, *Taraxacon.*

Beneficent Nature has in general made thoſe things moſt common which are moſt uſeful; and this plant is an inſtance. It is excellent againſt obſtructions of the viſcera, and in the ſcurvy. It is alſo of great uſe in the gravel, operating powerfully, yet ſafely, by urine. The beſt method of taking it in a fit of the gravel, is in ſtrong decoction: for the other caſes the lower part of the ſtalks, blanched, are beſt eaten in the way of ſallad.

2. Narrow-leaved Dandelion.

Dens leonis folio anguſtiore.

The root is long, and has many fibres.

The leaves are narrow, long, of a dark green, and divided into more and deeper ſegments than in the common kind.

One flower ſtands at the top of each ſtalk; and this is large, and yellow.

The ſeeds are rediſh, and are winged with down. Thoſe of the common kind are yellow.

It is frequent in gardens and paſtures, flowering all ſummer.

C. Bauhine calls it *Dens leonis anguſtiore folio.*

3. Rough Dandelion.

Dens leonis hirſutus.

The root is long, thick, and furniſhed with many fibres.

The leaves are oblong, broad, and hairy: they are of a pale green, and deeply divided.

The ſtalk is naked, but hairy; and at its top ſtands one large yellow flower.

It is frequent in paſtures, and flowers in July.

C. Bauhine calls it *Hieracium aſperum flore magno dentis leonis.* Others, *Dens leonis aſper*, and *Dens leonis hirſutus.*

4. Narrow-leaved Mountain Dandelion.

Dens leonis foliis integris.

The root is long and thick.

The leaves are long, narrow, and undivided: they are of a pale green, and lightly hairy.

The ſtalk is naked, and eight inches high, and the flower large and yellow.

We have it in Wales, and ſome of our mountainous counties. It flowers in Auguſt.

C. Bauhine calls it *Hieracium montanum anguſtifolium incanum.*

5. Branched Dandelion.

Dens leonis ramoſus.

The root is long and ſlender.

The leaves are very long, narrow, irregularly divided, and of a faint green.

The ſtalk, which naturally riſes ſingle, as in the others, is ſometimes in luxuriant ſoils ſplit into two or three diviſions.

The flowers are ſmall and yellow; and the ſeeds are blackiſh.

We have it in paſtures in Suſſex. It flowers in June.

Petiver calls it *Dens leonis ramoſus glaber*; and it is ſo named by Dillenius.

GENUS VI.

GOATS-BEARD.

TRAGOPOGON.

THE flower is compoſed of numerous floſcules, arranged together in a ſimple cup, formed of eight long and pointed parts, which unite in one common body at the baſe. Each floſcule is flat, ſhort, and indented in five places at the top. The leaves of the plant are graſſy, long, and narrow.

Linnæus arranges this with the reſt among his *ſyngeneſia.*

1. Common Goats-Beard.

Tragopogon vulgare.

The root is long and large, of a white colour, and well taſted.

The ſtalk is round, upright, jointed, not unfrequently branched, and two feet high.

The leaves are numerous, very long, ſlender, and of a fine green, with a tinge of bluiſh or greyiſh.

The flowers are large and yellow: they terminate the ſtalk and branches; and the leaves or ſegments of the cup exceed the body of the flower in length.

It is common in hilly paſtures, and flowers in June.

C. Bauhine calls it *Tragopogon pratenſe luteum majus.*

2. Purple Goats-Beard.

Tragopogon flore purpureo.

The root is long, thick, white, and fleſhy; and is of a very agreeable taſte.

The ſtalk is round, thick, jointed, and two feet or more in height.

The leaves are of a bluiſh green, very long, moderately broad, and ſharp-pointed.

The flowers ſtand at the tops of the ſtalks; and they are very large and purple.

It is found wild in meadows in the north of England, and flowers in July.

C. Bauhine calls it *Tragopogon purpuro-caruleum quod artifi vulgo.*

This and the common kind have the ſame qualities. Their roots are pleaſant; and this laſt is kept in gardens for the ſervice of the table, where it is called *ſalſafie.*

They operate gently by urine, and are good againſt the gravel.

The laſt kind is beſt taſted; but the other has moſt virtue.

GENUS VII.

SUCCORY.

CICHOREUM.

THE flower is compoſed of numerous floſcules, ranged in a common cup; which, before it opens, is of a cylindric figure. Thirteen ſcales or leaves form it; and of thoſe eight are narrow and oblong: theſe ſtand inward, and form the cylindric part. The other five are broader, ſhorter, and placed outward. Each floſcule is flat, and deeply indented in five places at the edge. The ſeeds have no downy matter annexed to them.

1. Wild Succory.

Cichoreum ſylveſtre.

The root is long and ſlender.

The ſtalks are thick, of a deep green, two feet high, but very irregular in their growth, frequently branched, and placed obliquely rather than upright.

The leaves are long, moderately broad, of a fine green, and deeply divided into toothed ſegments.

The flowers are large and blue: they ſtick to the ſtalks at the inſertions of the leaves, and ſometimes alſo terminate the branches.

It is common in waſte places, and flowers in Auguſt.

C. Bauhine calls it *Cichoreum ſylveſtre vel officinarum.*

The *garden-ſuccory* differs in nothing from it but culture.

It poſſeſſes the virtues of dandelion, but in a more powerful degree, operating ſtrongly by urine, and removing obſtructions of the viſcera.

The beſt method of taking it is in a ſtrong infuſion of the freſh-gathered root.

GENUS VIII.

NIPPLEWORT.

LAMPSANA.

THE flower is compoſed of about ſixteen petals, placed in a common cup; which is of an oval form, and angulated, and made of fourteen ſcales. Eight of theſe conſtitute the inner part, and they are long and narrow: ſix form the outer part at the baſe; and they are ſhort. Each floſcule is lightly divided into five parts at the end. The ſeeds have no down.

Linnæus ranges this, the following and preceding, with the reſt, among the *ſyngeneſia*.

1. Common Nipplewort.

Lampſana vulgaris.

The root is long, and hung with many fibres.

The ſtalk is upright, a yard high, of a faint green, and divided into many branches.

The leaves are large, oblong, broad, of a duſky green, and lightly and irregularly notched near the baſe, eſpecially thoſe toward the bottom of the ſtalk.

The flowers are very ſmall and yellow; but they are numerous at the tops of all the branches.

It is common in waſte ground, and flowers in July.

C. Bauhine calls it *Soncho affinis lampſana domeſtica.*

2. Dwarf Nipplewort, called Swines Succory.

Lampſana minima.

The root is long, ſlender, and hung with a few fibres.

The leaves are numerous and oblong, a little notched at the edges, and of a duſky green.

The ſtalk is naked, and ſometimes ſingle, ſometimes divided; of a pale green, and ſix inches high.

The flowers are ſmall and yellow; and they terminate the ſtalks and branches.

It is found in corn-fields, and flowers in June.

C. Bauhine calls it *Hyſeris.*

The root of the *common nipplewort* is recommended as diuretick and deobſtruent; but it is not uſed.

SERIES

SERIES II.

FOREIGN GENERA.

Thoſe of which there is no ſpecies native of this country.

GENUS I.

GUM-SUCCORY.

CHONDRILLA.

THE flower is compoſed of numerous floſcules, arranged in a common cup. This is of a cylindric form, and is compoſed of numerous ſcales, of two kinds; thoſe of the cylinder are oblong and narrow, thoſe at the baſe ſhort and broader. Each floſcule is flat, ſhort, and dented in five places at the end. The ſeeds are winged with down.

Linnæus places this with the others among the *ſyngeneſia*, the filaments ſupporting united buttons in a cylindric form.

Blue-flowered Gum-Succory.

Chondrilla flore cæruleo.

The root is long, thick, and hung with innumerable fibres.

The ſtalk is upright, firm, round, purpliſh, and divided at the top into a few branches.

The leaves are long, narrow, and very beautifully divided: they are cut into numerous, ſlender ſegments, like the pinnated leaves.

The flowers grow at the tops of the branches; and are large and blue.

It is a native of Italy, and flowers in July.

C. Bauhine calls it *Chondrilla cærulea.*

GENUS II.

GARDEN-LETTUCE.

LACTUCA HORTENSIS.

THE flowers are compoſed each of numerous floſcules, arranged in a common cup. This is of an oblong figure, and rounded at the baſe; and is compoſed of numerous, ſhort, ſoft, and pointed ſcales. The floſcules on each are narrow, flat, and divided at the end into four ſegments. The ſeeds are winged with a ſimple down.

Common Lettuce.

Lactuca vulgaris.

The root is compoſed of numerous fibres, connected to an oblong head.

The leaves are naturally oblong, broad, irregularly waved at the edges, and obtuſe at the ends; but in theſe, culture makes innumerable varieties and luxuriances.

The ſtalk is round, thick, two feet high, and of a pale green.

The leaves ſtand cloſe upon it, and ſurround it at the baſe; and they are oblong and broad, as the others.

The flowers are ſmall, and of a pale yellow.

It is a wild plant in Italy, flowering in Auguſt.

C. Bauhine calls it *Lactuca ſativa.*

GENUS III.

SCORZONERA.

THE flower is compoſed of numerous floſcules, arranged in a common cup. This is of a cylindric figure; and is formed of about fifteen leaves, which are long and narrow. Each floſcule is flat, and dented in five places at the end. The ſeed is winged with down.

Linnæus places this and the preceding among the *ſyngeneſia.*

Tall, narrow-leaved Scorzonera.

Scorzonera foliis longioribus anguſtis.

The root is long and ſlender.

The ſtalk is round, firm, upright, and two feet high.

The leaves are very numerous, long, narrow, of a pale green, and ſharp pointed.

The flowers ſtand at the tops of the branches; and are large and purple.

It is a native of Italy, and flowers in July.

C. Bauhine calls it *Scorzonera anguſtifolia ſubcærulea.*



Common Creeping Mouse ear



Common Dandelion



Rough Dandelion



Narrow leaved Mountain Dandelion



Common Goatsbeard



Purple Goatsbeard



Wild Succory



Nipple wort



Swines Succory



Common Lettuce



Blue flowerd Garden Succory



Tall narrow leaved Scorzonera



Common Endive



Common Celtsfoot in flower



Common Celtsfoot in the Leaf



Alpine Celtsfoot



Marbled Hawkweed



Small Hawkweed



Jagged leaved Hawkweed

GENUS IV.

ENDIVE.

ENDIVIA.

THE flower is compoſed of numerous floſcules, ranged in a common cup. This is of a cylindric form; and is compoſed of eight oblong ſcales, with five ſmaller at the baſe, and very ſhort. Each floſcule is divided deeply into five ſegments at the edge; and the ſeed is flattiſh.

Linnæus places this with the reſt among the *ſyngeneſia*.

Common Endive.

Endivia hortenſis.

The root is compoſed of innumerable fibres, connected to an oblong head.

The leaves are oblong, broad, and obtuſe at the end: culture fringes them at the edges, but naturally they are plain.

The ſtalk is thick, upright, and two feet high.

The leaves ſtand cloſe on this, and reſemble thoſe from the root.

The flowers are large and blue.

It is wild in Italy, and flowers in June.

C. Bauhine calls it *Intibus ſativa latifolia.*

This and the preceding are cooling, deobſtruent, and diuretick; but fitter to be taken in foods than as medicines.

The END of the TWENTY-SIXTH CLASS.

THE BRITISH HERBAL.

CLASS XXVI.

Plants whoſe flower is compoſed of numerous floſcules, arranged together in a common cup; and forming a rounded diſk, naked or encircled with petals; whoſe ſeeds are winged with down; and whoſe ſtalks and leaves have not the milky juice, diſtinguiſhing the preceding claſs.

THESE, though allied to the plants of the laſt claſs, are ſeparated perfectly from them by the form of the general flower, and diſpoſition of the floſcules.

The later writers, influenced only by the form and arrangement of minuter parts, have been blind to this: but Ray, and others, long preceding them, obſerved it. They call them the compoſite, diſcoide-flowered plants; and their diſtinction is ſo obvious, as well as certain, that none have erred about it.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this country.

GENUS I.

COLTSFOOT.

TUSSILAGO.

THE flower is compoſed of numerous floſcules, arranged in form of a diſk, and placed in a common cup. This is of a cylindric ſhape, and conſiſts of about twenty ſcales. The floſcules in the diſk are tubular; and they are edged with ſome flat ones in manner of rays; and one flower only ſtands on each ſtalk.

Linnæus places this, with all the ſucceeding genera of this claſs, among the *ſyngeneſia*, the buttons coaleſcing into a cylinder.

DIVISION I. BRITISH SPECIES.

Common Coltsfoot.
Tuſſilago vulgaris.

This differs from the generality of plants in the manner of its growth, the flowers appearing at one ſeaſon, and the leaves at another: we have therefore repreſented it in two figures.

The root is long, white, and creeping.

The ſtalks which ſupport the flowers are numerous, thick, juicy, purpliſh, eight inches high;

high; and they have imperfect membranes by way of leaves.

The flowers are large, and of a beautiful yellow: one ſtands on the top of each ſtalk.

After theſe appear the leaves: they are large, roundiſh, ſupported on long footſtalks; and of a deep green, but pale underneath, and downy.

The flowers appear early in ſpring, the leaves ſoon after.

It is common in clayiſh ſoils.

C. Bauhine calls it *Tuſſilago vulgaris.*

It is a celebrated and excellent pectoral. The beſt method of giving it is in form of a ſyrup, made of the juice of the leaves with honey. It is thus of excellent ſervice in aſthmas, coughs, and foreneſs of the breaſt.

DIVISION II. FOREIGN SPECIES.

Alpine Coltsfoot.

Tuſſilago Alpina purpurea.

The root is long and creeping.

The leaves are placed on ſhort, purpliſh footſtalks; and they are ſmall, of a roundiſh ſhape, and dented at the edges, of a deep green on the upper ſide, and woolly underneath.

The ſtalk is hollow, purpliſh, round, and eight inches high. On its top ſtands a ſingle flower, very large, and of a beautiful purple.

It is a native of Germany, and flowers in April.

C. Bauhine calls it *Tuſſilago Alpina rotundifolia caneſcens.*

GENUS II.

FLEABANE.

CONYZA.

THE flower is compoſed of numerous floſcules, placed in a common cup. Thoſe in the diſk are tubular; and they are ſurrounded with flat ones in the verge, diſpoſed as rays. The cup is of a cylindric form, ſhort, and compoſed of numerous ſcales. The ſeeds are winged with ſlight down.

Linnæus places this among the *ſyngeneſia*: but he makes a ſtrange diſtribution of the ſpecies among many diſtinct genera of other names.

1. Middle Fleabane.

Conyza flore majore luteo.

The root is compoſed of thick fibres.

The ſtalk is round, hairy, whitiſh, and two feet high.

The leaves are oblong, broad, and of a faint green: they are clammy to the touch, and have a ſtrong, diſagreeable ſmell.

The flowers ſtand at the tops of the branches, and are large and yellow.

It is common in wet places, and flowers in June.

C. Bauhine calls it *Conyza media aſteris flore luteo.* Others, *Conyza media.*

2. Small Fleabane.

Conyza minor.

The root is fibrous and brown.

The ſtalks are round, browniſh, a foot high, and very much branched.

The leaves are oblong, broad, obtuſe, and of a browniſh green.

The flowers ſtand at the tops of the branches; and are yellowiſh, and uſually naked; but occaſionally they have ſhort rays about the verge.

It is common in watery grounds, and flowers in Auguſt.

C. Bauhine calls it *Conyza minore flore globoſo.*

3. Jagged Fleabane.

Conyza paluſtris foliis laciniatis.

The root is fibrous and rediſh.

The ſtalk is upright, firm, and divided into many branches.

The leaves are long, narrow, ſharp-pointed, and very beautifully ſerrated on the edges.

The flowers ſtand at the tops of the branches; and they are numerous, large, beautifully radiated, and yellow.

It is found in our fen-counties, and flowers in July.

C. Bauhine calls it *Conyza aquatica laciniata.* Others, *Conyza major.*

The juice of *fleabane* is ſaid to be an excellent pectoral; but it is unpleaſant, and is not uſed.

GENUS

GENUS III.

STARWORT.

ASTER.

THE flower is compoſed of numerous floſcules, placed in a common cup. This is formed of very numerous ſcales, placed over one another. The floſcules in the diſk are tubular, and thoſe on the edge flatted; and the ſeeds have a fine down fixed to them.

Linnæus ranges this among the *ſyngeneſia* with the others.

DIVISION I. BRITISH SPECIES.

1. Starwort, called Golden Sampire.

After crithmum cryſanthemum dictus.

The root is large, and hung with many fibres.

The ſtalk is round, upright, juicy, green, and rarely branched.

The leaves are of a ſingular figure: they are long, narrow, and divided into three parts at the end. Their colour is a pale green; and they are of a fleſhy ſubſtance.

The flowers are large, aad of a fine yellow: one uſually terminates the ſtalk.

We have it on our weſtern coaſts. It flowers in July.

C. Bauhine calls it *Crithmum maritimum flore aſteris Attici.*

2. Sea-Starwort.

After Tripolium dictus.

The root is long, and furniſhed with many fibres.

The ſtalk is round, upright, and three feet high.

The leaves are long, narrow, and of a pale green, obtuſe at the ends, and not at all divided at the edges.

The flowers ſtand in numbers at the tops of the branches; and are large and blue.

It is common about ſalt rivers, and flowers in Auguſt.

C. Bauhine calls it *Tripolium majus cæruleum.*

3. Small Starwort, called Blue, ſweet Fleabane.

After arvenſis cæruleus acris.

The root is long, and has a few fibres.

The ſtalk is hairy, upright, and a foot high, of a rediſh colour, and toward the top branched.

The leaves are oblong, broad, of a duſky green, and hairy.

The flowers are moderately large, and of a purpliſh blue: they ſtand at the tops of the branches.

We have it on barren grounds, flowering in April.

C. Bauhine calls it *Conyza cærulea acris.* Others, *After cæruleus arvenſis.*

4. Starwort, called Dwarf Fleabane.

After conyza Canadenſis annua acris dicta.

The root is ſmall and fibrous.

The ſtalk is round, rediſh, upright, and a foot high.

The leaves are long, narrow, and of a lively green.

The flowers ſtand at the tops of the branches, and are ſmall and white.

It is found in many parts of England, but ſeems owing to ſeeds ſcattered and blown out of gardens. It flowers in May.

Boccone calls it *Conyza Canadenſis annua alba acris Linariæ foliis.* Others, *Conyzella.*

DIVISION II. FOREIGN SPECIES.

Narrow-leaved African Starwort.

After purpuraſcens anguſtifolius Africanus.

The root is long, and furniſhed with many fibres.

The ſtalk is upright, branched, and four feet high.

The leaves are large, but very narrow, of a pale green, ſharp-pointed, and not at all divided at the edges.

The flowers are large, and of a pale purple, ſometimes deeper, ſometimes whitiſh.

It is a native of the Cape of Good Hope, and flowers in June.

Commeline calls it *After anguſtifolius Africanus.*

GENUS IV.

WILD CARLINE.

CNICUS.

THE flower is compoſed of numerous floſcules, placed in a common cup. This is large, and is formed of numerous ſmall ſcales. The floſcules are tubular, and divided into five parts at the edge; and they are ſurrounded with *ſhining, hard rays.*

Linnæus places this among the *ſyngeneſia.*

Wild



Golden Lampwort



Sea Marigold



Small Marigold called Blue sweet Hudson



Narrow leaved Spiked Marigold



Wild Carline



Elecampane



Common Goldenrod



Marsh Goldenrod



Small Mountain Goldenrod



Broad leaved indented Goldenrod



Narrow American Goldenrod



Common Ragwort



Broad leaved Marsh Ragwort



Mountain Ragwort



Sea Ragwort



Common Groundsel

Tall Groundsel

Wild Carline.

Cnicus carlina ſylveſtris dictus.

The root is long, ſlender, and hard.

The ſtalk is upright, firm, of a yellowiſh green, and hairy.

The leaves are long, moderately broad, full of prickles, and of a ſhining green.

The flowers are large, and of a duſky yellow: they terminate the branches, and riſe alſo from the boſoms of the leaves.

We have it in dry paſtures, flowering in Auguſt.

C. Bauhine calls it *Cnicus ſylveſtris ſpinoſior*. Others, *Carlina ſylveſtris*.

GENUS V.

ELECAMPANE.

HELENIUM.

THE flower is compoſed of numerous floſcules, arranged in a common cup. This is large, and compoſed of many looſe ſcales. The floſcules are of two kinds, tubular in the centre, and flat or ligulated at the edge; and the buttons on the threads have briſtles behind them.

Linnæus places this among the *ſyngeneſia*.

Common Elecampane.

Helenium vulgare.

The root is very large and thick, brown, fleſhy, and of an aromatick taſte.

The ſtalk is five feet high, very thick, firm, and not much branched.

The leaves are large, oblong, pointed, and of a yellowiſh green.

The flowers grow at the tops of all the branches; and they are large and yellow.

We have it wild in paſture-grounds in Yorkſhire. It flowers in July.

C. Bauhine calls it *Helenium vulgare*. Others, *Enula campana*, and ſome *Inula*; Linnæus among others.

The root is an excellent pectoral, and poſſeſſes many other virtues. It is ſubaſtringent and diaphoretick. It is given with moſt ſucceſs in coughs, and diſorders of the lungs; and is no way better than eaten candied.

GENUS VI.

GOLDEN ROD.

VIRGA AUREA.

THE flower is compoſed of numerous floſcules, arranged in a common cup. This is oblong and ſcaly, and is formed of many oblong parts. The floſcules in the centre are tubular, and thoſe which ſurround them on the edge flat.

Linnæus places this with the others among the *ſyngeneſia*.

DIVISION I. BRITISH SPECIES.

1. Common Golden Rod.

Virga aurea vulgaris.

The root is compoſed of numerous fibres, connected to an oblong head.

The ſtalk is upright, and two feet high; and it is loaded with many branches.

The leaves are oblong, broad, and of a deep green.

The flowers are very numerous, and of a fine gold yellow: they ſtand at the tops of the ſtalks and branches.

It is common in dry places, and flowers in Auguſt.

C. Bauhine calls it *Virga aurea anguſtifolia minus ſerrata*. Others, *Virga aurea vulgaris*, and ſimply *Virga aurea*.

2. Marſh Golden Rod.

Virga aurea paluſtris.

The root is fibrous and white.

The ſtalks are numerous, ſlender, upright, and two feet high: they are uſually of a rediſh colour, and are not much branched.

The leaves are long, narrow, and beautifully ſerrated at the edges.

The flowers ſtand in great numbers at the tops of the branches, and are large and yellow.

It is a native of our fen-counties, and flowers in June.

C. Bauhine calls it *Conyza paluſtris ſerratifolia*.

3. Small, ſerrated-leaved Golden Rod.

Virga aurea humilis foliis ſerratis.

The root is compoſed of numerous fibres, connected to a ſmall head.

The ſtalks are tough, upright, very much branched, and a foot high.

The leaves are placed on long footſtalks; and are narrow, and ſerrated at the edges.

The flowers are numerous, ſmall, and yellow.

It is found in our hilly northern and weſtern counties, flowering in July.

Ray calls it *Virga aurea vulgari humilior*.

4. Narrow-leaved hoary Golden Rod.

Virga aurea anguſtifolia incana.

The root is compoſed of numerous, thick fibres.

The ſtalk is round, rediſh, and ſix or eight inches high.

The leaves are long, narrow, obtuſe, of a pale green, and a little hairy.

The flowers ſtand in cluſters at the top of the ſtalk, and on long footſtalks from the boſoms of the leaves: it is not uncommon in the weſt of England, and flowers in Auguſt.

Ray calls it *Virga aurea montana folio anguſto ſubincano floſculis conglobatis.*

5. Broad-leaved, indented Golden Rod.

Virga aurea folio anguſto ſerrato maximo.

The root is long and creeping, and is hung with numerous fibres.

The ſtalk is round, upright, and toward the bottom rediſh; and it is four feet high.

The leaves are long, broad, ſharp-pointed, elegantly ſerrated at the edges, and of a fine green.

The flowers ſtand in great numbers on the tops of the branches, into which the ſtalk divides at the ſummit; and they are large and yellow.

We have it in dry, waſte grounds in our northern counties. It flowers in July.

C. Bauhine calls *Virga aurea anguſtifolia ſerrata.* Others, *Solidago ſarracencia, Saracen's conſound.*

All the kinds of *golden rod* are aſtringent and vulnerary; but they are not uſed at preſent.

DIVISION II. FOREIGN SPECIES.

Knotted American Golden Rod.

Virga aurea ad alas florida.

The root is long, and furniſhed with many fibres.

The ſtalks are numerous, weak, but tolerably upright, of a pale green, and two feet or more high.

The leaves are broad, ſhort, and beautifully ſerrated, ſharp pointed, and of a fine green.

The flowers are numerous and ſmall: they ſtand at the top of the ſtalks, and in the boſoms of all the leaves, in cluſters; and they are ſmall and yellow.

It is a native of Virginia, and flowers in July.

Plukenet calls it *Virga aurea ad foliorum alas florifera.*

GENUS VII.

RAGWORT.

JACOBÆA.

THE flower is compoſed of numerous floſcules, ranged in a common cup. This is ſhort, of a cylindric figure; and compoſed of numerous, oblong, pointed ſcales. The floſcules are of two kinds, tubular in the centre of the diſk, and flat at the verge; the flower being radiated. The ſeeds are winged with a fine down.

DIVISION I. BRITISH SPECIES.

1. Common Ragwort.

Jacobæa vulgaris.

The root conſiſts of numerous, thick fibres, connected to a ſmall head.

The ſtalk is upright, thick, not much branched, and two feet high.

The leaves are divided into five ſegments, and are of a deep green.

The flowers ſtand in great cluſters at the tops of the ſtalks; and are large, and yellow.

It is common by way-ſides, and flowers in June.

C. Bauhine calls it *Jacobæa vulgaris laciniata.*

2. Hoary, groundſel-leaved Ragwort.

Jacobæa ſenicionis folio incana.

The root is fibrous and whitiſh.

The ſtalk is two feet high, rediſh, upright, and not much branched.

The leaves are large, divided, and of a greyiſh green on the upper-ſide, and whitiſh underneath.

The flowers ſtand at the tops in cluſters; and are large and yellow.

It is common in paſtures, and flowers in Auguſt.

Ray calls it *Jacobæa ſenicionis folio incana perennis.*

3. Broad-leaved Marſh-Ragwort.

Jacobæa paluſtris latifolia.

The root is fibrous.

The ſtalk is two feet and a half high, upright, and divided into many branches.

The leaves are large, broad, ſerrated at the edges, and a little notched toward the baſe.

The flowers ſtand at the tops of the ſtalks, and are large and yellow.

It is common about waters, and flowers in July.

C. Bauhine calls it *Jacobæa Alpina laciniata flore bupthalmi.* Others, *Jacobæa aquatica.*

4. Mountain-

4. Mountain-Ragwort.

Jacobæa montana foliis integris.

The root is oblong, ſmall, and hung with large fibres.

The ſtalk is upright, ſmooth, rediſh, and ten inches high.

The leaves, contrary to the reſt of the ſpecies, and to the name, are undivided: they are oblong, and of a pale green, and woolly.

The flowers ſtand at the tops; and they are large and yellow.

It is frequent in our mountainous counties, and flowers in June.

C. Bauhine calls it *Jacobæa montana lanuginoſa anguſtifolia non laciniata.*

The root of the *common ragwort* is aſtringent and vulnerary: it is beſt given in decoction; but it is not much uſed.

Sea Ragwort.

Jacobæa vulgaris.

The root is compoſed of numerous fibres.

The ſtem is hard, woody, and divided into many branches.

The leaves are deeply divided into ſegments; and they are of a duſky green on the upper-ſide, and perfectly white underneath.

The flowers ſtand at the tops of the branches, and are of a bright yellow.

It is common by the ſea-coaſts, and flowers in June.

C. Bauhine calls it *Jacobæa maritima cinerea.*

DIVISION II. FOREIGN SPECIES.

GENUS VIII.

GROUNDSELL.

SENECIO.

THE flower is compoſed of numerous floſcules, ranged in a common cup. This is ſhort, and formed of many oblong ſcales. The floſcules are of two kinds. Thoſe in the centre of the diſk are ſhort and tubular; and thoſe on the verge are ſomewhat flatted; but the flower is naked, not radiated. The ſeeds are winged with down.

Linnæus places this among the *ſyngeneſia.*

1. Common Groundſell.

Senecio vulgaris.

The root is formed of many fibres, joined to a ſmall head.

The leaves are long, and irregularly ſinuated at the edges.

The ſtalk is round, tender, thick, rediſh, and ten inches high.

The leaves on this reſemble thoſe from the root, and all are of a pleaſant green.

The flowers ſtand at the tops; and they are ſmall and yellow.

It is too common in cultivated grounds, and flowers all ſummer.

C. Bauhine calls it *Senecio minor vulgaris.* Others, *Erigeron.*

An infuſion of the leaves operates gently and eaſily by vomit.

The freſh roots ſmelt ſtrongly as ſoon as taken out of the ground, are an immediate cure for the headach. This is communicated to me by Iſaac Ware, Eſq; to whom an accident firſt diſcovered it.

2. Cottony Groundſell.

Senecio hirſutus odoratus.

The root is long, and hung with many fibres.

The ſtalk is two feet high, round, ſlender, not robuſt, nor much branched.

The leaves are oblong; and they are deeply and irregularly divided at the edges: theſe and the ſtalk are of a pale, greyiſh green; and are covered with a looſe cottony matter.

The flowers are ſmall and yellow.

It is common by road-ſides, and flowers in June.

The leaves have an ill ſcent, and are often clammy to the touch.

C. Bauhine calls it *Senecio incanus pinguis.* Others, *Erigeron tomentoſum.*

3. Small, broad-leaved Groundſell.

Senecio minor latiore folio.

The root is fibrous.

The ſtalks are thick, irregularly branched, and ten inches high.

The leaves are of a deep green, and of a fleſhy ſubſtance; oblong, broad, and ſlightly ſinuated.

The flowers are ſmall and yellow, and edged.

We have it on barren grounds. It flowers in Auguſt.

C. Bauhine calls it *Senecio minor latiore folio ſive montana.*

GENUS IX.

BUTTER-BUR.

PETASITES.

THE flower is compoſed of numerous floſcules, ranged in a common cup. This is of a cylindric figure; and is formed of about twenty little, ſoft leaves. The floſcules are tubular; and the flowers ſtand in a ſpike upon ſtalks, which riſe before the leaves.

Linnæus places this with the reſt among the *ſyngeneſia*.

1. Common Butter-Bur.

Petaſites vulgaris.

The root is long, thick, and creeping; of a ſtrong ſmell, and bitter, aromatick taſte.

The flower-ſtalks riſe before the leaves; and they are thick, ſtriated, tender, and of a pale fleſh-colour, not at all branched, and about a foot high.

The flowers are ſmall, and ſtand in a long, looſe ſpike at the top of the ſtalk: they are of a pale fleſh-colour.

The leaves appear ſoon after, and grow to an enormous ſize: they are roundiſh, and of a deep green on the upper-ſide, but whitiſh underneath; and they are placed on thick, whitiſh, hollowed footſtalks.

It is common in rich wet ſoils, and flowers in April.

C. Bauhine calls it *Petaſites major et vulgaris.* Others only *Petaſites.*

The root is a very powerful cordial and ſudorifick. An infuſion of it is excellent in malignant fevers.

2. Butter-Bur, with long footſtalks to the flowers.

Petaſites floribus pediculis longis inſidentibus.

The root is large and ſpreading.

The ſtalks ſupporting the flowers are two feet high, thick, whitiſh, juicy, and covered with ſlight membranes.

The flowers have long footſtalks; and they are numerous, and form a long, looſe ſpike: their colour is a pale red.

The leaves are very large, of a pale green above, and they have very little whiteneſs below.

It grows in meadows with us, not uncommon, and flowers in April.

Ray calls it *Petaſites major floribus pediculis longioribus inſidentibus.* The old authors did not know it.

GENUS X.

PLOWMAN'S SPIKENARD.

BACCHARIS.

THE flower is compoſed of numerous floſcules, ranged in a common cup; and this is ſhort, thick, and rounded. The ſcales compoſing it are numerous, and they ſtand ſeparate at the points. The floſcules are ſmall and tubular, and the leaves of the plant are undivided.

Linnæus places this with the reſt among the *ſyngeneſia.*

Common Plowman's Spikenard.

Baccharis vulgaris.

The root is long, thick, divided, and ſpreading.

The ſtalk is a yard high, firm, round, brownish, and divided into numerous branches.

The leaves are large, oblong, broad, of a duſky green, and undivided.

The flowers are naked, ſmall, and of a duſky yellow.

It is common in dry, waſte grounds, and flowers in July.

C. Bauhine calls it *Conyza major vulgaris.* Others, *Baccharis Monſpelienſium.*

The whole plant has a fragrant ſmell.

It is a powerful diuretick, and excellent againſt the gravel. It is beſt taken in infuſion.

GENUS XI.

HEMP-AGRIMONY.

EUPATORIUM.

THE flower is compoſed of numerous floſcules, arranged in a common cup. This is oblong; and conſiſts of many narrow, pointed ſcales, laid over one another. The floſcules are tubular, and divided into five ſegments at the edge.

Linnæus places this with the others among the *ſyngeneſia*, the buttons coaleſcing in a cylinder.

DIVI-

DIVISION I. BRITISH SPECIES.

Common ~~Water~~ Hemp-Agrimony.

Eupatorium vulgare:

The root is compoſed of numerous fibres, connected to a ſmall head.

The ſtalk is round, of a pale green, four feet high, and not much branched.

The leaves are divided in the manner of fingers; and the ſegments are very large, oblong, ſharp-pointed, ſerrated, and of a pale green.

The flowers ſtand at the tops of the ſtalks in vaſt tufts; and are of a pale fleſh-colour.

It is common by waters, and flowers in June.

C. Bauhine calls it only, *Eupatorium Cannabinum.* Others, *Eupatorium Cannabinum mas.*

The leaves of this plant are ſometimes undivided at the upper part of the ſtalks; and in this condition it has been deſcribed by ſome as a diſtinct ſpecies; but erroneouſly, for it is only a ſlight variety.

It is a powerful diuretick and deobſtruent. An infuſion of the leaves is good againſt the gravel; and in the beginnings of dropſies.

A ſtrong decoction of the freſh root is a rough purge.

DIVISION II. FOREIGN SPECIES.

American Hemp-Agrimony.

Eupatorium Americanum.

The root is compoſed of numerous fibres, connected to a ſmall head.

The ſtalk is firm, round, upright, of a rediſh colour, duſted over with grey, and is four feet high.

The leaves ſtand four at a joint; and they are oblong, broad, ſerrated, rough to the touch, and of a duſky green.

The flowers are placed at the tops of the branches in ſmall heads; and they are of a rediſh purple.

It is common by rivers in Virginia, and flowers in Auguſt.

Cornutus calls it *Eupatorium Americanum foliis enulæ.*

GENUS XII.

CUDWEED.

GNAPHALIUM.

THE flower is compoſed of numerous floſcules, placed in a common cup. This is of a rounded figure, and formed of many oval, pointed ſcales. The floſcules are tubular, and divided into five ſegments at the edge. The ſeeds are oblong, ſmall, and winged with down.

Linnæus places this with the reſt among the *ſyngeneſia.*

DIVISION I. BRITISH SPECIES.

1. Sea-Cudweed.

Gnaphalium maritimum.

The root is long and woody.

The ſtalks are numerous, round, white, and not much branched, and about ten inches high.

The leaves are ſhort, obtuſe, and not at all divided; they are of a white colour, and very thick covered with a downy matter.

The flowers ſtand at the tops of the branches; and are large and beautiful, of a ſhining white on the edge, and a gold yellow in the middle.

We have it by our ſea coaſts. It flowers in June.

C. Bauhine calls it *Gnaphalium maritimum*; a name others have copied.

The whole plant has an agreeable ſmell.

2. Long-leaved, upright Cudweed.

Gnaphalium Anglicum longifolium erectum.

The root is long and ſlender.

The ſtalks are ſlender, upright, and a foot and half high.

The leaves are long and narrow; and whitiſh, as are alſo the ſtalks.

The flowers grow in ſmall, black heads, in the boſoms of the leaves from the middle to the top of the ſtalk; and the plant is ſeldom at all branched.

It is common in woods and thickets, and flowers in June.

C. Bauhine calls it *Gnaphalium majus anguſto oblongo folio.*

3. Common Cudweed.

Gnaphalium vulgare.

The root is fibrous.

The ſtalk is firm, upright, and ten inches high: it is of a tough ſubſtance, a whitiſh colour, and branched in a ſingular manner.

At the height of about ſeven inches there ſtands a ſingle head of flowers, which terminates the main-ſtalk; and from this riſe two or more branches, each having at its top another head.

Theſe are of a yellowiſh brown; and the leaves are oblong and white; frequently alſo there riſe other branches from the lower part of the ſtalk.

C. Bauhine calls it *Gnaphalium vulgare majus.* Others, *Herba impia.*

4. The leaſt Cudweed.

Gnaphalium minimum.

The root is ſlender, and has a few fibres.

The ſtalk is tough, white, four inches high, and very much branched.

The leaves are ſhort and white.

The flowers grow in very ſmall heads on the tops of the ſtalks; and are ſmall, and pale coloured.

It is common in dry grounds, flowering in June.

C. Bauhine calls it *Gnaphalium minus repens.*

5. Black-headed, long-leaved Cudweed.

Gnaphalium longifolium humile ramoſum.

The root is compoſed of numerous long fibres.

The ſtalks are round, tough, ſix or eight inches high, and whitiſh; branched, and beſet irregularly with leaves.

Theſe are long, narrow, ſoft to the touch, and of a whitiſh colour.

The flowers ſtand in numerous, ſmall, black heads at the tops of the ſtalks and branches.

It is common in damp places, and flowers in July.

C. Bauhine calls it *Gnaphalium medium.* Others, *Filago minor.*

6. Narrow-leaved Dwarf Cudweed.

Gnaphalium pumilum ramoſiſſimum polyſpermum.

The root is ſlender, and hung with a few fibres.

The ſtalks are numerous, three inches high, very much branched, and of a white colour.

The leaves are oblong, extremely narrow, and ſharp-pointed: they are placed irregularly, and are of a whitiſh colour.

The flowers ſtand in the boſoms of the leaves in ſmall heads, and in vaſt numbers.

It is common in corn-fields in Suſſex, and flowers in July.

Ray calls it *Gnaphalium parvum ramoſiſſimum.*

7. Great-headed Cudweed.

Gnaphalium capitulis majoribus latifolium.

The root is long, and has many fibres.

The ſtalk is round, whitiſh, tough, and not much branched.

The leaves are numerous, broad, oblong, obtuſe at the ends, and white.

The flowers ſtand in large, brown heads, and are very permanent.

We have it in ſandy grounds in Suſſex. It flowers in Auguſt.

Petiver calls it *Gnaphalium Germanicum.*

8. Mountain-Cudweed.

Gnaphalium montanum flore magno.

The root is compoſed of many brown, tough fibres.

The ſtalks are numerous; and of theſe the greater part lie upon the ground, and do not exceed an inch and half in length: one or two riſe up, and are four or five inches high: theſe are round, of a whitiſh green, and not branched.

The leaves are oblong, broad, hairy, of a pale green on the upper-ſide, and whitiſh underneath.

The flowers ſtand at the tops of the ſtalks: and they are very large, of a ſilvery white, or faintly daſhed with purple.

We have it on mountainous heaths, but not common. It flowers in July.

C. Bauhine calls it *Gnaphalium montanum folio rotundiore.* Others, *Pes Cati, Cat's foot.*

There is a variety of this with longer leaves, which authors have erroneouſly deſcribed as a diſtinct ſpecies.

9. Tall American Cudweed.

Gnaphalium majus longifolium.

The root is compoſed of numerous, ſlender fibres.

The ſtalk is round, thick, upright, and two feet high.

The leaves are very numerous; and they are oblong, narrow, and ſharp-pointed, waved at the edges, and of a beautiful ſilvery white.

The flowers ſtand at the tops of the ſtalks in round ſilvery heads.

It is an undoubted native both of England and Wales, and is found in many places by the ſides of rivers, flowering in Auguſt.

C. Bauhine calls it *Gnaphalium Americanum latifolium.* Others, *Gnaphalium Americanum.*

10. Cluſter-leaved Cudweed.

Gnaphalium latifolium capitulis conglobatis.

The root is long, ſlender, and hung with a few fibres.

The ſtalk is round, upright, and whitiſh.

The leaves are placed alternately, and at conſiderable diſtances: they are oblong, broad, pointed at the end, and of a whitiſh green.

The flowers ſtand in round cluſters at the tops of the branches; and are of a ſilvery white, with a tinge of ſtraw-colour.

It is frequent in the Iſle of Jerſey, and in Ireland. It flowers in July.

C. Bauhine calls it *Gnaphalium majus lato oblongo folio.*

All the *cudweeds* poſſeſs the ſame virtues; but thoſe are not enough regarded. They are recommended as vulneraries; and they are excellent againſt hæmorrhages.

The *common cudweed*, called *herba impia*, I had an opportunity of ſeeing lately tried with vaſt ſucceſs. It is a known remedy in Suſſex for cattle when they have bloody ſtools; and this led a farmer, whoſe name is Martin Wakes, to try it himſelf in an habitual flux of the belly, attended frequently with bloody ſtools. He dried the whole plant in an oven, and powdered it, ſifting out the fine part, and throwing away the ſtrings. He boiled alſo the freſh plant, cut to pieces, four handfuls to two quarts of water, till it was very ſtrong.

He then took as much as would lie on a ſixpence of the powder, and a glaſs of the decoction warm, whenever the bloody ſtools returned. This proved always a temporary, and in the end

an effectual remedy; for the complaint never troubles him now, nor has for ſeveral years. This I ſaw tried ſucceſsfully; and the account of a compleat cure comes well atteſted. It is therefore worth the attention of thoſe who can introduce it univerſally.

DIVISION II. FOREIGN SPECIES.

Stinking Æthiopian Cudweed.

Gnaphalium fœtidum.

The root is long, and furniſhed with many fibres.

The ſtalk is round, upright, thick, rarely branched, and of a whitiſh colour.

The leaves are very broad, oblong, woolly, white, and without footſtalks.

The flowers ſtand at the top of the ſtalks in oblong, yellowiſh heads.

It is a native of Africa, and flowers in July.

Plukenet calls it *Gnaphalium Æthiopicum latifolium fœtidum*, the whole plant having a ſtinking ſmell.

The END of the TWENTY-SEVENTH CLASS.

THE

THE

BRITISH HERBAL.

CLASS XXVIII.

Plants whoſe flower is compoſed of many floſcules, arranged in a diſcoide form; and whoſe ſeeds are not winged with down.

THESE are ſeparated by Nature in a very diſtinct manner from all other plants: and the ſingle circumſtance of their ſeeds having none of that downy matter which is annexed to thoſe of the two preceding diviſions, is an obvious and unalterable mark of the claſs: it joins them to one another, while it excludes the reſt of the diſcoide flowered kinds.

This was a character Linnæus could not but perceive; and, to do him the juſtice due to his great accuracy in examination, he has never once omitted to name it; but unhappily the purpoſe of his ſyſtem being to exclude all but the minuter parts from the diſtinctions of claſſes, he could not uſe it for this end.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this country.

GENUS I.

CORN MARYGOLD.

CHRYSANTHEMUM.

THE flower is compoſed of many floſcules, of two kinds, arranged in a diſk or rounded head, and ſurrounded with numerous petals as rays; and it is placed in a hemiſpheric cup, made of numerous and cloſe-compacted ſcales. The floſcules in the centre of the diſk are tubular; thoſe on the rim are flat, and the ſeeds are oblong.

Linnæus places this and all the ſucceeding genera of the preſent claſs among the *ſyngeneſia*.

DIVISION I. BRITISH SPECIES.

1. Common Corn Marygold.

Chryſanthemum ſegetum vulgare.

The root is long, and hung about with many fibres.

The ſtalk is ſlender, upright, very much branched, and two feet high.

The leaves are oblong, ſharp-pointed, and ſerrated at the edges; and their colour is a pale, bluiſh green.

The flowers terminate the branches; and they are large and yellow.

It is common in our corn-fields, and flowers in July.

C. Bauhine calls it *Bellis lutea foliis profunde inciſis*.

2. Small



Butter burr in Flower



Leaves of Butter burr



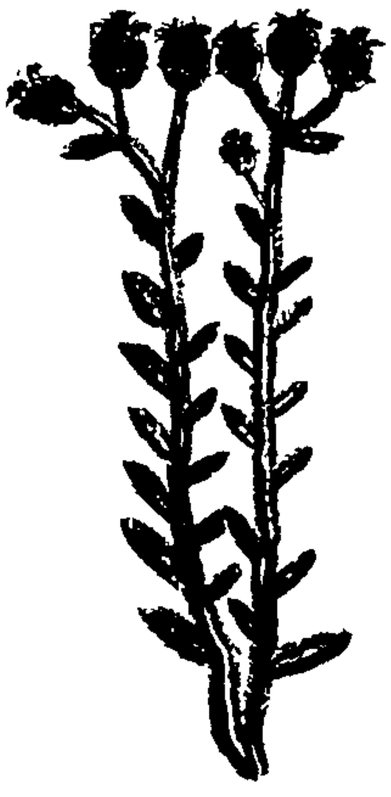
Plowmans Spikenard



Common Hempagrimony



American Hempagrimony



Sea Cudweed



Long leavid upright Cudweed



Common Cudweed



The least Cudweed



Blackheaded long leavid Cudweed



Mountain Cudweed



Tall American Cudweed



Clusterheaded Cudweed



Stinking Ethiopian Cudweed



Common Corn Marygold



Indian Corn Marygold



Common Daisy



Common Sneezewort



Virginian Sneezewort

2. Small-flowered Corn Marygold.

Chryſanthemum flore minore.

The root is compoſed of many long, white fibres.

The ſtalk is upright, branched, and two feet high.

The leaves are large, and deeply divided at the edges, ſo as to reſemble the pinnated kinds; and they are of a pale, bluiſh green.

The flowers are very numerous, ſmall, and yellow.

We have it in corn fields in ſome parts of the kingdom, but not frequent. It flowers in Auguſt.

Ray calls it *Chryſanthemum ſegetum noſtras folio glauco multiſciſſo.*

DIVISION II. FOREIGN SPECIES.

Indian Corn Marygold.

Chryſanthemum latifolium Indicum.

The root is long, white, and hung with a few fibres.

The ſtalk is round, purpliſh at the baſe, branched, and two feet high.

The leaves are broad, ſhort, ſharp-pointed, ſerrated at the edges, and of a bright green.

The flowers ſtand at the ſummits of the branches; and are large, and of a pale yellow.

It is a native of the Eaſt and Weſt Indies, and flowers in Auguſt.

Plukenet calls it *Chryſanthemum Maderaſpatanum oxycanthæ foliis.*

GENUS II.

OX-EYE.

BUPHTHALMUM.

THE flower is radiated, and compoſed of numerous floſcules; and is placed in a rounded cup, formed of many ſlender leaves. The floſcules in the central part of the diſk are tubular, and thoſe at the rim flat. The edge of the tubular floſcules is cut into five ſegments; and the ſeeds are oblong.

Linnæus places this with the reſt among the *ſyngeneſia.*

Common Ox-Eye.

Buphthalmum vulgare.

The root is long, and furniſhed with many fibres.

The ſtalk is round, upright, very much branched, and two feet and a half high.

The leaves are large, of a fine green, and very beautifully divided in a pinnated manner into oblong ſegments; which are ſharp-pointed, and ſerrated at the edges.

The flowers ſtand at the tops of the branches; and are very large, and of a fine gold yellow.

We have it damp grounds in ſome of our northern counties. It flowers in Auguſt.

C. Bauhine calls it *Buphthalmum tanaceti minoris foliis.*

GENUS III.

SNEEZEWORT.

PTARMICA.

THE flower is radiated, and compoſed of numerous floſcules; and is placed in a cup of an oval form, compoſed of ſmall, ſharp-pointed, and convergent ſcales. The floſcules in the diſk are tubular, and cut into five gaping ſegments at the edge: the floſcules in the edge are few in number; and each is divided in a heart-like manner at the top, and has a very ſmall ſegment in the midſt of the diviſion. The ſeed is oval.

Linnæus places this among the *ſyngeneſia*, joining it under one common head with the *yarrow*, and calling the genus *Achillea.*

DIVISION I. BRITISH SPECIES.

Common Sneezewort.

Ptarmica vulgaris.

The root is long, ſlender, and hung with many fibres.

The ſtalk is round, upright, and two feet and a half high, of a pale green, and branched.

The leaves are long, narrow, of a deep green, rough on the ſurface, ſharp-pointed, and ſerrated at the edges.

The flowers are very numerous, ſmall, and white: they ſtand in the tops of the branches.

It is common on damp ditch banks, and flowers in Auguſt.

C. Bauhine calls it *Dracunculus ſerrato folio pratenſis*.

The leaves powdered, and ſnuffed up the noſe, occaſion ſneezing, and are excellent againſt inveterate headachs. The young tops are of a ſharp, but pleaſant taſte; and may be eaten in ſallads.

DIVISION II. FOREIGN SPECIES.

Virginian Sneezewort.

Ptarmica Virginiana floribus conglomeratis.

The root is long, thick, and white.

The ſtalk is round, upright, branched, and a yard high.

The leaves are broad, ſhort, indented at the edges, ſharp-pointed, and of a deep green.

The flowers are ſmall and white; and they are placed in cluſters at the tops of the branches.

It is a native of Virginia, and flowers in July.

Moriſon calls it *Ptarmica Virginiana Helenii folio*. Others improperly make it a ſpecies of *maudlin*.

GENUS IV.

YARROW.

MILLEFOLIUM.

THE flower is radiated, and compoſed of numerous floſcules, arranged in an oval cup, compoſed of ſhort and broad ſcales. The floſcules in the centre are tubular, and divided into five gaping ſegments at the edge: thoſe at the rim are heart-ſhaped, and flat. The ſeeds are ſhort and thick, and ſmaller at one end than the other.

Linnæus ranges this among the *ſyngeneſia*.

DIVISION I. BRITISH SPECIES.

Common Yarrow.

Milleſolium vulgare.

The root is compoſed of many fibres, joined to a ſmall head.

The firſt leaves are very numerous, and of a fine dark green, long, moderately broad, and divided in a regular and beautiful manner into a number of minute parts.

The flowers ſtand at the tops of the ſtalks; which are upright, not much branched, and two feet high, in round tufts like umbells; and they are white, with a faint daſh of purpliſh.

It is common by way-ſides, and flowers in June.

C. Bauhine calls it *Milleſolium vulgare album*.

It is poſſeſſed of great virtues, though too much neglected. It is excellent againſt overflowings of the menſes, and hæmorrhages of all kinds; as alſo in looſeneſſes attended with bloody ſtools. The beſt way of taking it is in a ſtrong decoction.

DIVISION II. FOREIGN SPECIES.

Yellow Yarrow.

Milleſolium flore luteo.

The root is long, ſlender, and hung with many fibres.

The ſtalks are numerous, and a foot high; of a whitiſh green, and not much branched.

The leaves are long, narrow, and divided deeply into very minute ſegments, downy, and of a fine deep green.

The flowers ſtand at the tops of the ſtalks in large tufts, and are of a beautiful yellow.

It is a native of the warmer parts of Europe, and flowers in July.

C. Bauhine calls it *Milleſolium tomentoſum luteum*.

GENUS V.

DAISY.

BELLIS.

THE flower is radiated, and compoſed of many floſcules of different kinds, arranged in a common cup. This is formed of numerous, pointed ſegments, placed in a ſingle ſeries. The floſcules in the centre are tubular, and divided into five ſegments at the rim: thoſe in the verge are flat. The ſeeds are oval. The ſtalks are naked, having no leaves; and each ſupports only a ſingle flower.

Linnæus places this among the *ſyngeneſia*.

Common

Common Daiſy.

Bellis vulgaris.

The root is compoſed of numerous, long, and ſlender fibres.

The leaves riſe from the head of it in a large cluſter; and they are oblong, broad, obtuſe, ſlightly ſerrated, and of a deep green.

The ſtalks riſe among theſe in great number; and are naked, and four inches high.

Each ſupports a ſingle flower; which is white, tinged in various degrees with red at the tips of the rays, and in the centre yellow.

It is common in paſtures, and flowers all ſummer.

C. Bauhine calls it *Bellis ſylveſtris minor.*

A decoction of the roots is an excellent aſtringent.

Gardens produce numerous varieties of double flowers from this plant; and we ſometimes alſo ſee them double wild.

GENUS VI.

GREAT DAISY.

LEUCANTHEMUM.

THE flower is radiated; and is compoſed of many floſcules, of two kinds, arranged in a common cup. This is formed of very numerous ſcales, growing larger as they ſtand more inward, and in the whole is of a half-round ſhape. The floſcules in the centre are tubular, and divided into five open ſegments at the rim: thoſe in the verge are oblong, flatted, and three-pointed.

Linnæus ranges this with the reſt among the *ſyngeneſia.*

Great Daiſy.

Leucanthemum vulgare.

The root is compoſed of numerous fibres, connected to a ſmall head.

The ſtalk is ribbed, upright, branched, and a foot and half high.

The leaves are long, moderately broad, of a deep green, and ſharply ſerrated on the edges.

The flowers ſtand at the tops of the branches; and are large and white, with the diſk yellow.

It is common in our paſtures, and flowers in June.

C. Bauhine calls it *Bellis ſylveſtris caule folioſo major.*

GENUS VII.

CHAMOMILE.

CHAMÆMELUM.

THE flower is radiated, and compoſed of two kinds of floſcules, arranged together in a common cup. This is of a hemiſpheric figure; and is formed of narrow, and nearly equal ſegments. The floſcules in the centre are tubular, and cut into five ſegments at the edge, which turn back. Thoſe in the verge are flat, and oblong.

Linnæus places this among the *ſyngeneſia*, and changes the name of the genus to *anthemis.*

1. Common Chamomile.

Chamæmelum vulgare.

The root is fibrous.

The ſtalk is round, upright, ſlender, and branched: it is a foot and half high, and of a whitiſh colour.

The leaves are placed irregularly, and are of a fine, ſtrong green: they are divided into numerous very ſlender ſegments, and are of an inoffenſive ſmell.

The flowers are large, the rays are white, and the central part is yellow.

It is common in corn-fields, and flowers in July.

C. Bauhine calls it *Chamæmelum vulgare leucanthemum Dioſcoridis.* Others, *Chamæmelum erectum.*

2. Sweet creeping Chamomile.

Chamæmelium repens odoratum.

The root is compoſed of many very long, thick, and tough fibres, and ſpreads far under the ſurface.

The ſtalks are numerous, ſtriated, of a pale green, weak, and branched: they lie in part upon the ground; and are a foot or more in length.

The leaves are of a bright green, and deeply divided into ſegments: they are of a very fragrant ſmell.

The flowers are numerous, and terminate the branches: they are white, but have a yellow diſk; naturally ſingle, but eaſily doubled by culture.

It is common in damp places on heaths, and flowers in July.

C. Bauhine calls it *Chamæmelum nobile ſive leucanthemum odoratius.* Others, *Chamæmelum Romanum.*

The flowers of this ſpecies are an excellent carminative and ſtomachick, and are dried for the ſervice of medicine. The ſingle have moſt virtue; but the double are more uſed.

3. Stinking

3. Stinking Mayweed.

Chamæmelum fœtidum.

The root is compoſed of numerous fibres, connected to a ſmall, oblong head.

The ſtalk is upright, branched, and a foot and half high: it is of a purpliſh colour at the bottom, of a whitiſh green upwards, and ſtriated.

The leaves are divided into very fine ſegments; and they are of a blackiſh green.

When bruiſed they have a moſt offenſive and diſagreeable ſmell.

The flowers ſtand at the tops of the branches; and are large and white, with a yellow diſk.

It is common in waſte ground, and flowers in May.

C. Bauhine calls it *Chamæmelum fœtidum*. Others, *Cotula fœtida*.

Its flowers have the ſame virtues with thoſe of *common chamomile*.

4. Sea-Chamomile.

Chamomelum maritimum craſſis foliis.

The root is compoſed of numerous, thick, long fibres.

The ſtalks are branched, weak, and in part procumbent, of a purpliſh colour at the bottom, and upwards of a pale green.

The leaves are oblong, and of a deep green, divided into numerous ſmall ſegments, and of a thick ſubſtance.

The flowers are large and white, with a yellow diſk.

It is found about our ſea-coaſts, and flowers in July.

Ray calls it *Chamæmelum maritimum perenne humilius*.

5. Great-flowered Chamomile.

Chamæmelum inodorum flore magno.

The root is fibrous.

The ſtalk is ſingle, upright, branched, and a foot high.

The leaves are divided into numerous fine ſegments; and they are obtuſe at the ends.

The flowers are large and white, with a yellow diſk.

It is common among corn, and flowers in July.

C. Bauhine calls it *Chamæmelum inodorum*.

6. Tall Chamomile with ſmall flowers.

Chamæmelum elatius flore minore.

The root is compoſed of numerous, long, ſlender fibres.

The ſtalk is firm, upright, two feet high, and branched.

The leaves are cut into very ſmall ſegments, and are of a faint green.

The flowers ſtand in great numbers at the tops of the branches; and are ſmall, white; and yellow in the centre.

The ſtalk in this ſpecies is uſually red.

It is common on plowed land, and flowers in July.

Ray calls it *Chamæmelum majus folio tenuiſſime*.

7. Great-flowered procumbent Chamomile.

Chamæmelum caule procumbente floribus majoribus.

The root is long, ſlender, and hung with a few fibres.

The ſtalk is procumbent in great part, and is divided into many branches.

The leaves are large, divided into fine ſegments, and of a blackiſh green.

The flowers are few in number; but they are very large, white, with a yellow central diſk.

It is common in damp, plowed fields, flowering in Auguſt.

Ray calls it *Chamæmelum inodorum annum humilius*.

8. Broad-leaved Sea-Chamomile.

Chamæmelum maritimum latiore folio.

The root is fibrous.

The ſtalks are numerous, and a foot or more in length; but they lie in great part on the ground. Their colour is a pale green; and they are very much branched.

The leaves are broad, and of a pale green; and they are divided into numerous ſegments, which are alſo broader than in the other kinds.

The flowers are large and white, with a yellow diſk.

It is frequent about our northern coaſts, and flowers in July.

C. Bauhine calls it *Matricaria marina*. Ray, *Chamæmelum maritimum ramoſius flore albo*.

GENUS VIII.

FEVERFEW:

MATRICARIA.

THE flower is radiated, and compoſed of numerous floſcules of two kinds, placed in a common cup. This is of a hemiſpheric form; and is compoſed of narrow, cloſe, compacted, and nearly equal ſcales. The floſcules in the centre are tubular, and divided into five gaping ſegments at the rim: thoſe in the verge are flatted, oblong, and three-pointed. The ſeeds are oblong.

Linnæus places this with the reſt among the *ſyngeneſia*.

Feverfew.

Matricaria vulgaris.

The root is compoſed of numerous fibres, connected to an oblong ſmall head.

The ſtalk is of a pale green, upright, very much branched, and two feet and a half high.

The leaves are large, broad, and of a yellowiſh green, deeply divided in the pinnated manner into broad, indented ſegments.

The

Pl. 66

Common Yarrow.

Yellow Yarrow.

Common Little Daisy

great Daisy.

Common Chamamile

Sweet Creeping Chamamile.

Stinking May Weed.

Sea Chamamile.

Feverfew.

Water hemp agrimony w.th divided Leaves.

Dwarf hemp agrimony.

Common Tansy.

Common Wormwood

Sea Wormwood.

Roman Wormwood.

Wild Southernwood

Garden Southernwood

Common Mugwort

The flowers ſtand in great numbers at the tops of the branches; and they are ſmall and white, with a yellow diſk.

It is common in waſte ground, and flowers in June.

C. Bauhine calls it *Matricaria vulgaris.*

The flowers in this plant, and in the ſweet chamomile, and ſome others, are deficient ſometimes in the rays; whence they have been divided into two ſpecies, and theſe imperfect plants, called *naked feverfew*, *naked chamomile*, and the like.

The virtues of *feverfew* are very great. It is an excellent deobſtruent. It promotes the menſes, and cures thoſe hyſterick complaints which riſe from their obſtruction. It alſo deſtroys worms.

GENUS IX.

WATER HEMP-AGRIMONY.

VERBESINA.

THE flower is compoſed of numerous floſcules, encloſed in a common cup. The floſcules are tubular, and divided at the rim into five pointed ſegments, which ſtand erect. There are ſometimes flat floſcules on the verge, but not conſtantly. The cup is formed of numerous, narrow, pointed, and hollowed ſcales. The ſeeds have points, and ſtick by them to any thing they touch.

Linnæus places this among the *ſyngeneſia* with the others.

1. Water Hemp-Agrimony, with divided leaves.

Verbeſina foliis tripartitis.

The root conſiſts of numerous fibres, connected to a ſmall head.

The ſtalks are upright, and a yard high, very much branched, and of a browniſh colour.

The leaves are large, and divided into three principal ſegments; which are ſharp-pointed and ſerrated; and they are of a deep green colour.

The flowers ſtand on the extremities of the ſtalks; and they are yellow: ſometimes they are naked, and ſometimes they have rays of a brighter yellow.

It is common by ditch-ſides, and flowers in July.

C. Bauhine calls it *Cannabina aquatica folio tripartito diviſo.*

2. Large-flowered Water Hemp-Agrimony.

Verbeſina flore majore integrifolia.

The root is long, and hung with very numerous fibres.

The ſtalk is upright, not much branched, and two feet high.

The leaves are oblong, broad, ſharp-pointed, and ſerrated, but not divided into three parts, as in the other.

The flowers are very large and yellow.

It is frequent in the weſt of England, and the flowers are almoſt always radiated. It flowers in Auguſt.

C. Bauhine calls it *Cannabina aquatica folio non diviſo.*

3. Dwarf Hemp-Agrimony.

Verbeſina pumila flore magno.

The root is fibrous.

The ſtalk is ſingle, upright, purpliſh, not at all branched, and ten inches high.

The leaves are oblong, moderately broad, ſharp-pointed, ſerrated lightly on the edges, and of a browniſh green.

The flowers ſtand at the tops of the ſtalks; and are naked, large, and yellow.

It is found in boggy places, and flowers in Auguſt.

Ray calls it *Verbeſina minima.*

The virtues of theſe plants are not certainly known.

GENUS X.

TANZY.

TANACETUM.

THE flower is naked, and compoſed of numerous floſcules. Theſe are all of one kind: they are tubular, and wide open at the mouth, where they divide into five reflex ſegments. Theſe are all contained in a common cup; which is of a hemiſpheric figure, and is compoſed of numerous, pointed ſcales, cloſe ſet together. The ſeeds are oblong.

Linnæus places this with the reſt among the *ſyngeneſia.*

Common Tanzy.

Tanacetum vulgare.

The root is compoſed of numerous fibres, connected to a ſmall head.

The leaves are very large, and of a fine ſtrong green: they are deeply divided into oblong ſegments, which are ſerrated and ſharp-pointed, and often they are curled at the edges.

The ſtalk riſes in the midſt of a cluſter of theſe; and is a yard high, upright, not much branched, and thick ſet with leaves, like thoſe from the root.

The flowers grow in great cluſters at the

top of the ſtalks; and they are ſmall and yellow.

It is common in hilly places in our northern counties, whence it has been brought into gardens. It flowers in July.

C. Bauhine calls it *Tanacetum vulgare luteum.*

It is diuretick and carminative, but is more uſed in food than medicine.

GENUS XI.

WORMWOOD.

ABSINTHIUM.

THE flowers are compoſed of numerous floſcules, of two kinds, arranged in a common cup. Thoſe in the centre are tubular, and thoſe on the verge are flat, but naked. The cup is roundiſh; and is formed of numerous, rounded, convergent ſcales. The ſeeds are ſmall and ſhort.

Linnæus places this among the *ſyngeneſia.*

DIVISION I. BRITISH SPECIES.

1. Common Wormwood.

Abſinthium vulgare.

The root is long, and hung with many fibres.

The ſtalks are numerous, whitiſh, a yard high, very much branched, and full of leaves: theſe are alſo of a whitiſh green, eſpecially on the under-ſide; and they are large, divided deeply in the pinnated manner into broad ſegments, and thoſe again deeply divided.

The flowers ſtand in long ſeries on the tops of the branches, and are of a pale brown.

It is common by way-ſides, and flowers in June.

C. Bauhine calls it *Abſinthium ponticum.* Others, *Abſinthium vulgare.*

2. Sea-Wormwood.

Abſinthium maritimum album.

The root is compoſed of many fibres, connected to a ſmall head.

The ſtalks are two feet high, divided into numerous branches, and of a whitiſh colour.

The leaves are divided into many ſmall ſegments; and they are of a white colour, and tough ſubſtance.

The flowers ſtand at the tops of the ſtalks, and are ſmall and brown.

It is common in our ſalt-marſhes, and flowers in Auguſt.

C. Bauhine calls it *Abſinthium ſeriphium Belgicum.*

3. Sweet Sea-Wormwood.

Abſinthium maritimum odoris grati.

The root is compoſed of long, white fibres, joined to a ſmall head.

The ſtalk is a foot high, white, irregularly upright, and divided into numerous branches.

The leaves are oblong, and divided into a few broad ſegments; and they are white and woolly.

The flowers are ſmall and browniſh; and they ſtand upright at the tops of the branches.

It is found in our ſouthern coaſts, and flowers in July.

Ray calls it *Abſinthium maritimum odoris grati.*

The *common ſea-wormwood* has ſometimes broader ſegments in the leaves, and has in this ſtate of accidental variation been deſcribed by ſome as a diſtinct ſpecies, under the name of *Abſinthium maritimum latiore ſolo.*

4. Spiked Sea Wormwood.

Abſinthium maritimum ſpicatum.

The root is long, ſlender, and hung with a few fibres.

The ſtalk is two feet high, upright, not much branched, and of a whitiſh colour.

The leaves are very beautifully divided into long, narrow ſegments; and they are of a greyiſh colour.

The flowers are diſpoſed in ſmall brown heads, which form a kind of ſpikes all along the tops of the branches.

We have it on the coaſt of Eſſex. It flowers in July.

J. Bauhine calls it *Abſinthium ſeriphium tenuifolium marinum Narbonenſe.* Barreliere, *Abſinthium cinereum.*

This ſometimes has the ſegments broader, and the leaves whiter; in which ſtate it is by ſome deſcribed alſo as a diſtinct ſpecies.

DIVISION II. FOREIGN SPECIES.

Roman Wormwood.

Abſinthium Romanum.

The root is fibrous and creeping.

The ſtalks are numerous, woody, brown, and two feet high.

The leaves are ſet very thick upon them; and they are divided into numerous, ſlender ſegments. Their colour is a greyiſh green; and they have an agreeable ſmell, and aromatick taſte, with ſome bitterneſs.

The flowers grow toward the tops of the branches in little round brown heads.

It is a native of the warmer parts of Europe, and flowers in July.

C. Bauhine

C. Bauhine calls it *Abſinthium ponticum tenuifolium incanum.*

All the kinds of *wormwood* are ſtomachick, and good againſt obſtructions of the viſcera. The common kind is the ſtrongeſt, but inſufferably nauſeous. The *ſea-wormwood* is the kind moſt uſed, but the *Roman wormwood* is vaſtly preferable to them all. This *ſea-wormwood* is ſold in the markets under the name of *Roman wormwood*, and is almoſt univerſally uſed as ſuch by the apothecaries: but the error is very great; and the other is ſo common in gardens, and lives and encreaſes ſo freely in them, that a ſupply is eaſy.

GENUS XII.

SOUTHERNWOOD.

ABROTANUM.

THE flower is compoſed of numerous tubular floſcules, arranged in a diſk, with a few flat ones at the edge, but has no rays; and it is placed in a roundiſh cup, compoſed of ſhort, broad ſcales.

Linnæus places this among the *ſyngeneſia*, with the reſt of the corymbiferous and other compoſite-flowered kinds.

DIVISION I. BRITISH SPECIES.

Wild Southernwood.

Abrotanum campeſtre.

The root is long, thick, and hung with many fibres.

The ſtalks are ſhrubby, upright, and very much branched: they are of a whitiſh colour toward the bottom, and rediſh toward the top.

The leaves are oblong, and divided into numerous very narrow ſegments; and their colour is a greyiſh green.

The flowers ſtand in thick ſpikes at the tops of the branches; and they are ſmall and brown.

It is frequent by road-ſides in our ſouthern counties, flowering in July.

C. Bauhine calls it *Abrotanum campeſtre.*

DIVISION II. FOREIGN SPECIES.

Garden Southernwood.

Abrotanum hortenſe.

The root is compoſed of many thick fibres, connected to a ſmall head.

The ſtalks are numerous, woody, and a yard high, brown at the bottom, greyiſh at the top, and thick ſet with finely divided leaves, of a whitiſh green.

The flowers ſtand in brown heads at the tops of the ſtalks.

It is common in Spain and Italy wild, and with us every where in gardens.

C. Bauhine calls it *Abrotanum mas anguſtifolium majus.*

It is a powerful diuretick, and is good in hyſterick caſes.

The beſt way of uſing it is in conſerve made of the freſh tops, beaten up with twice their weight of ſugar.

GENUS XIII.

MUGWORT.

ARTEMISIA.

THE flower is compoſed of numerous floſcules, ranged in a common cup. Theſe are tubular in the centre; and there are a few flat ones at the verge; but the whole flower is naked, not radiated. The cup is of an oval form, ſmall, oblong, and narrow at the top; and it is compoſed of ſhort, pointed ſcales.

Linnæus places this with the reſt among the *ſyngeneſia.*

Common Mugwort.

Artemiſia vulgaris.

The root is compoſed of numerous, thick fibres, connected to a ſmall head.

The ſtalk is a yard high, firm, upright, and branched, purpliſh toward the bottom, and pale upwards.

The leaves are very large; and they are deeply divided into ſegments, which are narrow and ſharp-pointed: they are of a duſky green on the upper-ſide, and white underneath.

The flowers ſtand along the tops of the branches in ſmall brown heads, with a tinge of purpliſh.

It is common by way-ſides, and flowers in Auguſt.

C. Bauhine calls it *Artemiſia vulgaris major.*

It is an excellent medicine in hyſterick complaints, and in all obſtructions of the viſcera. It is beſt taken in infuſion.

GENUS XIV.

SCABIOUS.

SCABIOSA.

THE flower is compoſed of numerous floſcules, arranged in a common cup. This is formed of oblong ſcales in ſeveral ſeries. Each floſcule is tubular, and divided at the top into five ſegments; and has beſide the common cup two, an outer and inner, peculiar to itſelf. The ſeeds are oval, and pointed.

Linnæus ſeparates this from the reſt of the campoſite-flowered plants, by many claſſes, placing it among the *tetrandria*, the buttons not coaleſcing.

DIVISION I. BRITISH SPECIES.

1. Common Scabious.

Scabioſa vulgaris.

The root is compoſed of many thick fibres, united to a common head.

The leaves that riſe firſt are oblong, broad, and of a pale green.

The ſtalk is two feet high, hairy, upright, not much branched, and of a pale green. The leaves on this are divided deeply on the edges.

The flowers ſtand at the tops of the ſtalks, and are large and blue.

It is common in corn-fields, and flowers in June.

C. Bauhine calls it *Scabioſa pratenſis hirſuta quæ officinarum.*

It is excellent againſt diſorders of the breaſt given in infuſion.

2. The Leſſer Scabious.

Scabioſa minor.

The root is long, thick, and furniſhed with many fibres.

The ſtalk is round, upright, ſlender, and two feet high.

The leaves are all very deeply divided into ſegments, and are of a faint green.

The flowers are large, and naturally blue; but they are ſometimes rediſh or white.

It is common in dry paſtures, and flowers in July.

C. Bauhine calls it *Scabioſa capitulo globoſo minor.*

3. Scabious, with bitten roots.

Scabioſa radice ſucciſa.

The root is thick, ſhort, and abruptly broken off, and has a multitude of thick fibres.

The leaves that firſt riſe from it are oblong, of a deep green, not indented at the edges, and ſmooth.

The ſtalks are ſlender, upright, and a foot and half high.

The flowers are of a deep blue.

It is common in meadows, and flowers in Auguſt.

C. Bauhine calls it *Scabioſa ſucciſa glabra et hirſuta.* Our people, *Blue devil's-bit.*

DIVISION II. FOREIGN SPECIES.

Muſk-Scabious.

Scabioſa flore ſuave olente.

The root is formed of many fibres, connected to a ſmall head.

The ſtalk is upright, of a pale green, round, very much branched, and a yard high.

The leaves are divided into very fine ſegments.

The flowers are placed at the tops of the branches, and are of a deep purple, almoſt black, and they have a fine muſky ſmell.

It is a native of Spain, and flowers in Auguſt.

C. Bauhine calls it *Scabioſa moſchata,*

GENUS XV.

TEASELL.

DIPSACUS.

THE flower is compoſed of numerous floſcules, arranged in an oval head, within a common cup. This is compoſed of a few narrow and ſharp pointed leaves. Each floſcule is tubular, and divided at the rim into four ſegments.

Linnæus places this with the former among the *tetrandria*, ſeparating them entirely from the reſt of the corymbiferous tribe, which ſtand among his *ſyngeneſia*.

1. Common Teaſell.

Dipſacus vulgaris.

The root is long, thick, and has a few large fibres.

The ſtalk is round, whitiſh, thick, upright, and ſix feet high.

The leaves are long, and moderately broad: they ſtand in pairs, and unite at the baſe in ſuch

a manner as to hold water: they are of a fine green, and their under rib is prickly.

The flowers are ſmall, and of a pale red; and they ſtand in vaſt oval heads.

It is common by way-ſides, and flowers in July.

C. Bauhine calls it *Dipſacus ſylveſtris ſive virga paſtoris major.*

2. Small Teaſell.

Dipſacus minor.

The root is oblong, ſmall, and hung with many fibres.

The ſtalk is upright, very much branched, and a yard high.

The leaves are broad, and of a deep green: they ſtand in pairs, but their baſes do not unite as in the other.

The flowers are whitiſh and ſweet; and they ſtand in little round heads.

It is common by road-ſides, and flowers in Auguſt.

C. Bauhine calls it *Dipſacus minor ſeu capitulo minore.*

The *common teaſell*, cultivated in good ground, grows larger in all its parts, and the heads are uſed in dreſſing of cloth.

The END of the TWENTY-EIGHTH CLASS.

THE

BRITISH HERBAL.

CLASS XXIX.

Plants whoſe flower is compoſed of ſix petals, or has ſix ſegments; whoſe ſeed-veſſel is divided into three cells, containing each a double ſeries of ſeeds; whoſe leaves are graſſy, and whoſe root conſiſts of a ſingle, roundiſh lump, with fibres from the baſe.

THESE are a numerous and very beautiful ſeries of plants; and all who have taken the plain road of Nature in forming ſyſtems of botany, have therefore kept them in one claſs, and ſeparated all others from them. Ray calls them the bulbous rooted plants; this kind of root being univerſally underſtood by the term *bulb*; and the leaves from all of them are long, ſlender, and without footſtalks, which is the ſenſe of the term *graſſy*.

Linnæus, as is his cuſtom, takes the character of the claſſes in which theſe plants are arranged, from the number of filaments in the flower; and in this inſtance, as in every other, he ſeparates thoſe genera which Nature has allied into the moſt remote parts of his ſyſtem; and joins with every diviſion of them thoſe which ſhe ſeparates moſt widely from them. Thus, in his method, the *colchicum* and *crocus*, allied as cloſely as two diſtinct genera can be, are ſeparated by three claſſes; the *crocus* being one of his third, becauſe there are but three threads in the flower; and the *colchicum* one of his ſixth claſs, becauſe there are in that ſix filaments.

Let the unprejudiced examine theſe two plants, and judge between us, whether Linnæus have done well in ſeparating, or I in bringing them again together. The reſpect I have for this author, notwithſtanding my diſlike to his ſyſtem, makes it diſagreeable to me to accumulate cenſures upon him: but, in ſupport of the exceptions made to his method in this reſpect, I muſt add, that, beſide ſeparating theſe plants from one another, he has joined in the ſame claſs with the *crocus* the *tamarind-tree*, and with the *colchicum* and *tulip* he has placed the *aſparagus* and *berberry-buſh*.

SERIES I:

BRITISH GENERA.

Thoſe of which one or more ſpecies are naturally wild in this country.

GENUS I.

GARLICK.

ALLIUM.

THE flower is compoſed of ſix petals, and the ſeed-veſſel is very broad and ſhort. A number of theſe flowers are contained in a common ſcabbard, which is roundiſh, and terminates in a ſingle or double point. The ſeeds are numerous, and roundiſh.

Linnæus ranges this among the *hexandria monogynia*; the threads being ſix, and the ſtyle ſingle.

DIVISION I. BRITISH SPECIES.

1. Crow-Garlick.

Allium ſylveſtre tenuifolium.

The root is ſmall, roundiſh, covered with a red ſkin, and of a very ſtrong taſte.

The leaves are very long, ſlender, hollow, and of a pale green.

The ſtalk is round, upright, and a foot high.

The head is ſmall, and is frequently compoſed altogether of little fleſhy ſubſtances, which ſhoot out leaves in the manner of roots, and take root when they fall: ſometimes there are among theſe ſmall, greeniſh flowers.

It is common in paſtures, and ſometimes among corn. It flowers in June.

C. Bauhine calls it *Allium campeſtre juncifolium capitatum purpuraſcens majus.* Others, *Allium ſylveſtre juncifolium.*

2. Purple Mountain-Garlick.

Allium montanum purpureum majus.

The root is a large, round bulb, with many fibres at the bottom.

The leaves are long, and ſomewhat broad, flat at the upper-ſide, and hollowed underneath, and of a fine deep green.

The ſtalk is upright, round, and two feet high.

The head is round and large, purpliſh in colour, and compoſed of numerous fleſhy ſubſtances, as in the other, with a few faint red flowers between and among them.

It is common on hills in our northern counties, and flowers in July.

Ray calls it *Allium montanum bicorne purpureum proliferum.*

3. Striped Garlick.

Allium flore ſtriato.

The root is a ſmall, roundiſh bulb, of a white colour.

The leaves are long, narrow, and of a pale green.

The ſtalk is a foot and half high, round, and green.

The flowers ſtand in a cluſter at the top; and they are of a greeniſh white, ſtreaked with purple.

We have it among corn in Eſſex. It flowers in July.

C. Bauhine calls it *Allium montanum bicorne flore exalbido.* Cluſius, *Moly montanum tertium*; a name others have followed.

4. Purple Garlick.

Allium latifolium flore purpurescente.

The root is round, ſimple, and large.

The leaves are numerous, broad, and of a deep green.

The ſtalk is a foot and half high.

The flowers ſtand at its top in a great round cluſter; and they are purple.

We have it in the weſtern counties not uncommon. It flowers in June.

Ray calls it *Allium Holmenſe ſpherico capite.*

5. Broad-leaved Wild Garlick.

Allium ſylveſtre latifolium album.

The root is round and whitiſh.

The leaves are oblong, very broad, and of a fine deep green.

The ſtalk is of a pale green, three ſquare, and ten inches high.

The flowers ſtand at the top in a cluſter; and they are ſmall and white.

It is common in damp ground, and flowers in April.

C. Bauhine calls it *Allium ſylveſtre latifolium.* Our people, *Ramſons.*

6. Great Mountain Garlick.

Allium montanum elatius.

The root is compoſed of ſeveral ſmall pieces, covered with one common ſkin, which is tough and rediſh.

The leaves are broad, ſtriated, and of a deep green.

The ſtalk is two feet and a half high, round, green, and juicy.

At its top ſtands a head, compoſed of fleſhy tubercles, of a blackiſh purple, with a few pale purple flowers between them.

It is found in the north of England, flowering in April.

DIVISION II. FOREIGN SPECIES.

Common Garlick.

Allium hortenſe.

The root is compoſed of numerous ſmall pieces, encloſed in one common ſkin.

The leaves are long and narrow, and of a pale green.

The ſtalk is round, upright, and ſmooth.

At the top ſtand a great number of flowers, collected into a round, cluſtered head: they are ſmall and whitiſh.

It is a native of the Eaſt, but for its uſe is cultivated every where in gardens.

Some are fond of the root in food; and it is excellent in medicine.

A ſyrup of *garlick* is a great remedy in aſthmas. It is alſo aperient, and good in all obſtructions of the viſcera, and is recommended againſt contagious diſorders.

GENUS II.

DAFFODILL.

NARCISSUS.

THE flower is formed of a long, tubular body, and ſix petals. This tubular part is by common writers called the cup of the flower, but is its nectarium; and the petals are oblong, and are inſerted into it above the baſe. The ſeed veſſel is roundiſh, but marked with three ridges; and the ſcabbard encloſing the flowers before they open, is oblong and flatted.

Linnæus places this among the *hexandria monogynia*; the threads being ſix, and the ſtyle ſingle in the flower.

DIVISION I. BRITISH SPECIES.

1. Wild Engliſh Daffodill.

Narciſſus ſylveſtris pallidus.

The root is ſmall, and roundiſh.

The leaves are narrow and long, and of a ſtrong green.

The ſtalk is upright, and a foot high; and on its top ſtands a ſingle flower. This is large and yellow: the edge of the nectarium or tubular part is waved, and the petals are paler than this part.

We have it frequent wild in the north of England in damp paſtures, flowering in April.

C. Bauhine calls it *Narciſſus ſylveſtris pallidus calyce luteo.* Others, *Pſeudo-narciſſus Anglicus.*

2. Pale Daffodill, called Primroſe-Peerleſs.

Narciſſus medio luteus vulgaris.

The root is ſmall, and roundiſh.

The leaves are long, and ſomewhat broad, ſtriated, and of a pale green.

The ſtalk is flatted, and a foot high.

The flowers are very beautiful.

The petals are large, and of an extreme pale yellowiſh, little more than we call cream-colour; and the nectarium is ſmall and yellow.

We have it wild in the north of England, and it is frequent in gardens.

C. Bauhine calls it *Narciſſus pallidus medio luteo.* Others, *Narciſſus medio luteus.*

DIVISION II. FOREIGN SPECIES.

Ruſh-leaved Daffodill, called Junquille.

Narciſſus juncifolius vulgaris.

The root is ſmall, and roundiſh.

The leaves are long, ſlender, hollow, rounded, and of a deep green.

The ſtalk riſes in the midſt; and is ſlender, and a foot high.

The flowers are of a beautiful pale yellow, and very ſweet.

It is a native of the Eaſt, but is kept every where in gardens, where culture raiſes many varieties of it.

C. Bauhine calls it *Narciſſus juncifolius*; a name copied by others.

GENUS III.

STAR OF BETHLEHEM.

ORNITHOGALUM.

THE flower is compoſed of ſix petals, which remain after they have loſt their colour. They have no cup. The ſeed-veſſel is roundiſh, but has three ridges; and there are a kind of films at the baſe of all the footſtalks of the flowers.

Linnæus places this, with many other of the bulbous plants, among the *hexandria monogynia.*

DIVISION I. BRITISH SPECIES.

1. Wild, ſpiked Star of Bethlehem.

Ornithogalum anguſtifolium ſpicatum flore ex albo virente.

The root is round, large, and white.

The leaves are long, narrow, and of a pale green.

The ſtalk is round, upright, and two feet high.

The flowers ſtand in a long ſpike at the top, and are of a greeniſh white.

It is found wild in our weſtern counties, and flowers in April.

C. Bauhine calls it *Ornithogalum anguſtifolium majus.*

2. Common Star of Bethlehem.

Ornithogalum vulgare.

The root is large, round, and white.

The leaves are numerous, very narrow, long, and of a dark green.

The ſtalk is round, upright, and eight inches high.

The flowers grow in a kind of umbel, not a

ſpike; and they are large and white, with a ſtreak of green on the back of each petal.

We have it on damp places in hilly grounds, but not common. It flowers in April.

C. Bauhine calls it *Ornithogalum umbellatum medium.*

3. Yellow Star of Bethlehem.
Ornithogalum luteum.

The root is round and ſmall.

The leaves are of a pale green, long, narrow, and graſſy.

The ſtalk is about four inches high, round, and alſo of a pale green.

The flowers are of a beautiful yellow.

We have it wild in the northern counties. It flowers in April.

C. Bauhine calls it *Ornithogalum luteum.* Others, *Cepe agraria.*

DIVISION II. FOREIGN SPECIES.

Tall, ſpiked Star of Bethlehem.
Ornithogalum majus ſpicatum.

The root is large, round, and white.

The leaves are long, and have ſome breadth; but they are of the graſſy form.

The ſtalk is upright, round, and a yard high.

The flowers are of a delicate white; and they ſtand in a fine, long ſpike at the top of the ſtalk.

It is a native of Spain, and flowers in Auguſt.

C. Bauhine calls it *Ornithogalum ſpicatum majus.*

The virtues of theſe plants are unknown; but their beauty has given them a place in gardens.

GENUS IV.

HYACINTH.

HYACINTHUS.

THE flower is formed of a ſingle petal, tubular at the baſe, and divided into ſix ſegments at the edge; and there is within, a nectarium, formed of three diſtinguiſhable openings on the top of the rudiment of the fruit. There is no cup. The ſeed-veſſel is roundiſh, but marked in three places.

Linnæus places this among the *hexandria monogynia.*

DIVISION I. BRITISH SPECIES.

1. Small Vernal Star-Hyacinth.
Hyacinthus ſtellaris minor.

The root is round and ſmall.

The leaves are long, graſſy, and of a pale green. There generally riſe only two or three with the ſtalk.

The ſtalk is round, ſlender, and ſix inches high.

The flowers ſtand in a ſhort ſpike; and are deeply divided, and of a fine blue.

We have it in our northern counties. It flowers in April.

C. Bauhine calls it *Hyacinthus ſtellaris trifolius Germanicus.* Others, *Hyacinthus ſtellaris vernus.*

2. Common Blue Hyacinth.
Hyacinthus cæruleus vulgaris.

The root is round white.

The leaves are long, graſſy, and of a pale green.

The flowers grow on the top of a thick, round, juicy ſtalk, which is a foot high, and bends at the ſummit: they are long, tubular, and of a deep blue.

It is common under hedges, and flowers in April.

C. Bauhine calls it *Hyacinthus cæruleo flore oblongo major.* Others, *Hyacinthus vulgaris*, and *Hyacinthus Anglicus.*

3. Leſſer Autumnal Star-Hyacinth.
Hyacinthus ſtellaris autumnalis minor.

The root is ſmall and round.

The leaves are numerous, long, narrow, and of a faint green.

The ſtalk is ſlender, of a pale green, and ſix inches high.

The flowers ſtand in a ſpike at the top; and are ſmall, deeply divided into pointed ſegments, and of a fine ſky-blue.

We have it on heaths, but not common. It flowers in Auguſt.

C. Bauhine calls it *Hyacinthus ſtellaris autumnalis minor*; a name others have copied.

DIVISION II. FOREIGN SPECIES.

Blue Muſcari.

Hyacinthus flore cæruleo globoſo.

The root is round and ſmall.

The leaves are numerous, and of a pale green.

The ſtalk is round, upright, broad, and ten inches high.

The flowers ſtand drooping in a thick, ſhort ſpike at the top; and they are globular, or nearly ſo, and blue.

It is a native of the Eaſt, and flowers in Auguſt.

C. Bauhine calls it *Muſcari vulgare.*

GENUS V.

MEADOW-SAFFRON.

COLCHICUM.

THE flower is large, and riſes immediately from the root. It conſiſts of a long, tubular baſe, and a broad body, at the top divided into ſix ſegments, reſembling ſo many large petals. There is no cup. The ſeed-veſſel is divided into three parts, and the leaves appear at a different time from the flowers.

Linnæus places this among the *hexandria trigynia*; the threads being ſix, and the ſtyles three, and of equal length with them.

Meadow-Saffron.

Colchicum vulgare.

The root is large and round.

The leaves are numerous, long, and when fully expanded very broad: they naturally appear at a different time from the flower; and if any chance to riſe with it, they are narrower.

The flower riſes out of the ground without any ſtalk, its own tubular baſe ſerving to that purpoſe: it is very large, and of a pale, but elegant purple. The ſegments are naturally ſix; but ſometimes they are double that number in the wild plant; and ſometimes, inſtead of an uniform purple, the flower is ſtreaked with white, or is white throughout.

We have it in meadows in our ſouthern counties. It flowers in September.

C. Bauhine calls it *Colchicum commune.*

The root is accounted poiſonous.

GENUS VI.

SAFFRON.

CROCUS.

THE flower is formed of a ſingle petal, tubular, and very long at the baſe, and divided into ſix ſegments at the edge, which ſeem ſo many diſtinct petals. The ſcabbard ſerving as a cup, is formed of a ſingle piece. The ſeed-veſſel is roundiſh, but marked with three ridges.

This plant, which is ſcarce to be diſtinguiſhed as a genus from the preceding, Linnæus places in a different claſs, the *triandria*, becauſe the threads in the flower are only three.

True Saffron.

Crocus verus autumnalis.

The root is roundiſh, and has many fibres at the bottom.

The leaves are very narrow and graſſy, of a dark green, and are marked with a white rib along the middle.

The flowers are large, and of a fine blue purple, with orange-coloured tops to the ſtyles.

It is found in ſome parts of the kingdom growing in fields under hedges, but probably has been owing to roots ſcattered from places where it was cultivated for ſale.

It flowers in Auguſt.

C. Bauhine calls it *Crocus ſativus.*

The part uſed in medicine riſes from the top of the ſtyle, and is in its termination deſtined to receive the farina from the buttons of the threads, for impregnating the ſeeds. This conſiſts of three orange-coloured, waved, flat filaments; which are ſeparated from the reſt of the flower, and dried with care.

The whole compaſs of medicine does not afford a nobler cordial or ſudorifick. It is excellent alſo in obſtructions of the viſcera, in powder or tincture.

GENUS VII.

BULBOCODIUM.

THE flower is compoſed of ſix petals, and has no cup. The ſeed-veſſel is marked with three ridges; and there are ſome rudiments of leaves upon the ſtalk.

Linnæus places this among the *hexandria*.

Alpine Bulbocodium.

Bulbocodium flore rubente.

The root is ſmall and round.

The leaves are numerous, long, narrow, and of a pale green.

The ſtalk is four inches high, very ſlender, and has a few imperfect leaves.

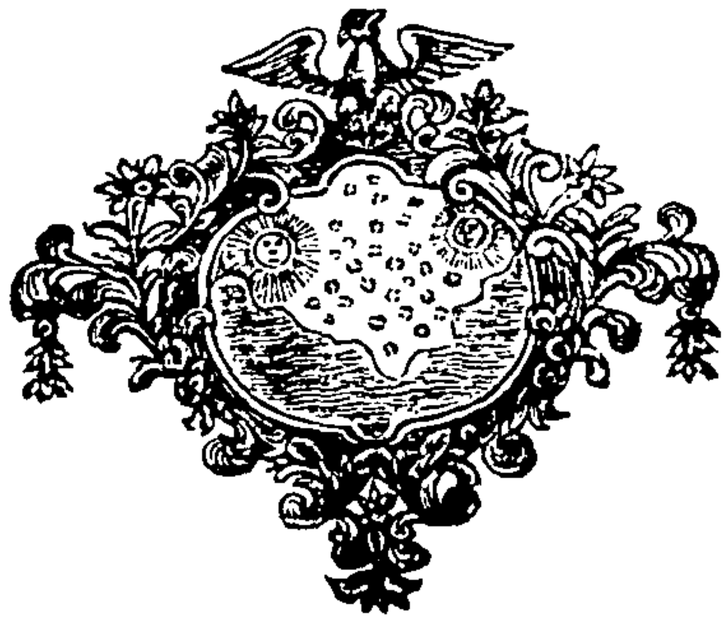
One flower ſtands at the top; and this is ſmall, and of a pale red on the outſide, but white within.

We have it on our northern mountains. It flowers in Auguſt.

Ray calls it *Bulbocodium Alpinum pumilium juncifolium flore unico extus rubente.*

Its virtues are unknown.

The END of the TWENTY-NINTH CLASS.



THE

THE

BRITISH HERBAL.

CLASS XXX.

Plants whoſe flower is conſpicuous, and of an irregular ſtructure; whoſe leaves are graſſy, and whoſe roots are not bulbous.

THESE are diſtinguiſhed by Nature as perfectly as the preceding from all other plants. Their leaves have the aſpect of thoſe of the bulbous tribe; but their roots are either maſſy and irregular, or formed of double parts, or of implicated fibres, riſing from a thick head.

This diſtinction of Nature Ray and others have followed, calling them *herbæ bulboſis affines*, and keeping them together in one claſs. But Linnæus has ſcattered them over different parts of his works, taking his characters not from theſe larger parts, but from the threads in the flower.

SERIES I.

BRITISH GENERA.

Thoſe of which one or more ſpecies are found wild in this country.

GENUS I.

FLAG-FLOWER.

IRIS.

THE root is maſſy and irregular. The leaves are edged as ſwords. The flower is formed of one petal, divided into ſix parts: three of theſe ſtand outward, and turn back; and the other three are placed inward, and are erect. The ſeed-veſſel is oblong, and angulated.

Linnæus places this among the *triandria monogynia*, the filaments in the flower being three, and the ſtyle ſingle.

DIVISION I. BRITISH SPECIES.

1. Common Flag-Flower.

Iris lutea vulgaris.

The root is brown, thick, and creeping.

The leaves are very long, ſomewhat broad, of a pale green, edged on each ſide, and ſharp-pointed.

The ſtalk is a yard high, of a pale green, and beſet with a few ſhorter leaves.

The flowers are large and yellow.

It is common by water, and flowers in July.

C. Bauhine calls it *Acorus adulterinus*. Others, *Iris paluſtris lutea*.

The dried roots are diuretick, and good againſt obſtructions of the viſcera.

2. Whitiſh Flag-Flower.

Iris pallidior.

The root is thick, and ſpreads irregularly under the ſurface.

Broad Eared Wild Garlick

Wild English Daffodill

Pale Daffodill, called Bimmore Peeries

Rush leaved Daffodil called Jonquill

Wild Spiked Star of Bethlehem

Common Star of Bethlehem

Yellow Star of Bethlehem

Tall Spiked Star of Bethlehem

Small vernal Star Hyacinth

Common blue Hyacinth

Lesser Autumnal Star Hyacinth

Blue Muscari

Meadow Saffron

Dutch Saffron

Alpine Bulbocodium

Common May flower

Lancashire bastard Asphodell

The leaves are ſhort, ſharp-pointed, edged on both ſides, and of a pale green, with a tinge of greyiſh.

The ſtalk is two feet high; and the flowers are large, and of a pale yellow.

We have it by waters. It flowers in June.

Ray calls it *Iris paluſtris pallida.*

3. Stinking Flag-flower, called Gladdon.

Iris fœtida Xyris dicta.

The root is thick, and ſpreads under the ſurface.

The leaves are numerous, long, edged, and pointed, and of a deep green.

The ſtalk is two feet high, and at the top ſtand ſeveral flowers: they are large, but of a greyiſh diſagreeable colour.

The leaves, when bruiſed, have a ſtrong, unpleaſant ſmell.

It is common in damp places, and flowers in Auguſt.

C. Bauhine calls it *Gladiolus fœtidus.* Others, *Xyris*, *Iris fœtida*, and *Spatula fœtida.* Our people, *Stinking Gladdon.*

DIVISION II. FOREIGN SPECIES.

Blue Flower-de-Luce.

Iris hortenſis vulgaris.

The root is thick and ſpreading.

The leaves are long, broad, of a deep green, edged on both ſides, and ſharp-pointed.

The ſtalk is two feet and a half high, and at its top ſtand ſeveral large flowers: theſe are of a very beautiful blue.

It is a native of the warmer parts of Europe, and flowers in Auguſt.

C. Bauhine calls it *Iris cærulea vulgaris.*

The juice of the root expreſſed, with white wine, is a rough purge, but excellent in dropſies.

GENUS II.

BASTARD-ASPHODELL.

PHALANGIUM.

THE root conſiſts of numerous implicated fibres, riſing from a ſhort, thick head. The leaves are graſſy. The flowers are formed each of a ſingle petal, divided into ſix unequal ſtarry ſegments. The ſeed-veſſel is three-cornered.

Linnæus places this among the *hexandria*, the threads in the flower being ſix.

1. Lancaſhire Baſtard Aſphodell.

Phalangium iridis folio majus.

The root has many thick, brown fibres.

The leaves are long, of a bluiſh green, ſharp-pointed, and edged on the two ſides.

The ſtalk is upright, and two feet high.

The flowers grow at the top in a long, beautiful ſpike; and are ſmall, and of a gold yellow.

It is found on bogs in ſome parts of England, but is not common. It flowers in Auguſt.

C Bauhine calls it *Pſeudo-aſphodelus paluſtris Anglicus.* Others, *Aſphodelus Lancaſtriæ.*

2. Dwarf Baſtard-Aſphodell.

Phalangium minimum.

The root is compoſed of innumerable fibres, riſing from a ſmall, thick head.

The leaves are of a duſky green, long, narrow, and ſharp at the point and edges.

The ſtalk is ſlender, and eight inches high.

The flowers ſtand at the top in a looſe irregular ſpike; and they are ſmall, and of a pale yellow.

It is found on bogs in Scotland, and the north of England. It flowers in July.

Ray calls it *Phalangium Scoticum paluſtre minimum iridis folio.*

GENUS III.

ORCHIS.

THE flowers are collected into a ſpike; and they have no cup. Each is compoſed of five petals, and furniſhed with a nectarium. Three of the petals ſtand outward, and the two others inward; and theſe two riſing upwards, form a kind of hood. The nectarium is formed into two lips and a baſe, and is fixed to the receptacle: it has its place between the petals. The ſeed-veſſel is oblong, and the ſeeds are minute. The leaves are oblong, and moderately broad.

We have many irregular names in Engliſh for the various ſpecies of this genus; but it is more adviſable to retain the Latin name *orchis*, which is very familiar, to them all.

The roots afford no certain character: they are in moſt ſpecies double and roundiſh, but in ſome triple, in others handled, and in ſome only ſingle.

It is a very extenſive as well as ſingular genus; and, after the general characters here given, we hope to explain the differences of the ſpecies, without that tedioufneſs and prolixity too general in the accounts of them in authors.

Linnæus ranges them among the *gynandria diandria*; the filaments being two, and theſe inſerted

on the rudiment of the ſtyle. He divides them into two genera, under the names of *orchis* and *ſatyrium*; the principal difference of which is, that the hinder part of the nectarium is in the *orchis* p inted and long, and in the *ſatyrium* ſhort and nipped. Theſe characters are not enough to ſeparate plants, ſo evidently connected by Nature to one another; and we have therefore joined them.

1. Great Goat Orchis.

Orchis barbata fœtida.

The root is a double bulb, or is compoſed of two roundiſh parts of the bigneſs of walnuts.

The leaves are very large, broad, oblong, and of a deep green.

The ſtalk is a yard high, and has ſome leaves on it.

The ſpike of flowers is long and thick: they are placed on twiſted bodies; and are of a whitiſh green, variegated with purple, and diſtinguiſhed by long, greeniſh beards, formed of the lower lip of the nectarium.

The whole plant has a ſtrong and diſagreeable ſmell,

We have it in many parts of England in rich damp places. It flowers in Auguſt.

C. Bauhine calls it *Orchis barbata fœtida*. Others, *Tragorchis*.

2. Small Goat Orchis.

Orchis barbata minor.

The root is a double bulb.

The leaves are broad, obtuſe, and of a deep green.

The ſtalk is thick, juicy, and a foot high.

The flowers are ſmall and white, and have white beards.

It is found in our ſouthern counties, and flowers in July.

Ray calls it *Orchis barbata fœtida minor flore albo.*

3. Male Fool's Orchis.

Orchis morio mas.

The root is a double bulb.

The leaves are long, broad, of a deep green, and ſpotted with black.

The ſtalk is ten inches high.

The flowers are large, and of a fine purpliſh red, with a few deep purple ſpots: they ſtand in looſe, ſhort ſpikes at the tops of the ſtalks.

It is common in paſtures, and flowers in June.

C. Bauhine calls it *Orchis morio mas foliis maculatis.*

4. Female Fool's Orchis.

Orchis morio fœmina.

The root is a double bulb.

The leaves are long, and of a faint green; and the ſtalk is a foot high.

The flowers ſtand in a ſhort, looſe ſpike; and the body of them is purple; but the ſide ſegments are ſtreaked with green.

It is common in paſtures, and flowers in June.

C. Bauhine calls it *Orchis morio fœmina.*

5. Little purple Orchis.

Orchis pumila floribus purpureis punctatis.

The root a ſmall double bulb.

The leaves are long and obtuſe.

The ſtalk is eight inches high; and the flowers, before they are opened, terminate it in a duſky cone. When opened, they are ſmall, and ſtand thick in a ſhort ſpike: their hood is purple, and their under-part whitiſh, but full of purple ſpots.

We have it on dry, chalky hills, flowering in July.

C. Bauhine calls it *Cynoſorchis militaris pratenſis humilior.*

6. Purple Sweet Orchis.

Orchis purpurea odorata.

The root is a double bulb.

The leaves are very broad, oblong, and of a deep green.

The ſtalk is a foot and half high.

The flowers ſtand at the top in a long ſpike; and they are of a deep fine purple, and have a light fragrance.

We have it in rich meadows, flowering in June.

C. Bauhine calls it *Orchis obſcure purpurea odorata.*

7. Purple Late Orchis.

Orchis purpurea ſpica congeſta pyramidali.

The root is a double bulb.

The leaves are oblong, moderately broad, and of a deep green.

The ſtalk is two feet high.

The flowers ſtand at the top in a thick, ſhort ſpike; and are of a pale rediſh colour, without any ſpots: they have long and ſlender ſpurs.

It is found in dry paſtures, and flowers in the beginning of July.

C. Bauhine calls it *Cynoſorchis militaris ſpica rubente conglomerata.*

8. Yellow Muſk-Orchis.

Orchis odorata radice ſimplici.

The root is a ſingle tuberous lump.

The leaves are oblong, broad, and of a pale green.

The ſtalk is ſlender, and eight inches high.

The flowers ſtand in a long, ſlender, looſe ſpike; and they are ſmall, and of a greeniſh yellow: they have a light fragrance.

It is found in dry paſtures, and flowers in autumn.

C. Bauhine calls it *Orchis odorata moſchata ſive mono-orchis*; a name others have copied.

9. Lady Trace Orchis.

Orchis ſpiralis alba.

The root is a triple bulb.

The leaves are ſhort, broad, pointed at the end, and of a pale green.

The ſtalk is round, and of a whitiſh green, and ſix inches high.

The flowers are ſmall and whitiſh; and they ſtand in a twiſted or ſpiral ſeries at the top of the ſtalk.

We

We have it in dry paſtures, but not common. It flowers in Auguſt.

C. Bauhine calls it *Triorchis alba odorata*. Our people, *Ladies orchis*, and *Ladies traces*.

Authors ſpeak of a leſſer kind, but it is only a variety; and of a ſmall *bulbous orchis*, which is in the ſame manner a variety of the preceding.

10. Common Man-Orchis.

Orchis floribus ſubcinereis.

The root is a double bulb.

The leaves are numerous, broad, oblong, and of a deep green.

The ſtalk is round, and of a pale green, and is a foot high.

The flowers are outwardly of a duſky greyiſh colour; and are of a paler hue, and tinged more or leſs with red within. Fancy has ſuppoſed the repreſentation of a human body, arms, and legs, in this flower; whence it has obtained the name *man-orchis*; but the reſemblance is far-fetched.

C. Bauhine calls it *Cyno-orchis latifolia hircante cucullo major.*

We have it in dry paſtures, flowering in June.

11. Blackiſh flowered Man-Orchis.

Orchis flore majore purpuro nigricante.

The root is a double bulb.

The leaves are oblong, broad, and of a ſtrong green.

The ſtalk is a foot and half high.

The flowers are large; and they ſtand in a great, thick ſpike at the top.

The upper part of the flower is of a blackiſh purple: the lower part is ſuppoſed to have a repreſentation of a human body, with the arms and legs; and this part is whitiſh, and covered with reddiſh or purpliſh hairs.

We have it on chalky hills. It flowers in June.

J. Bauhine calls it *Orchis magna latifolia.*

12. Greeniſh Man-Orchis.

Orchis flore ſubviridi.

The root is a double bulb.

The leaves are numerous, broad, and of a deep green.

The ſtalk is a foot and half high.

The flowers terminate it in a long, looſe ſlender ſpike: they have the ſame reſemblance of the human form with the preceding; and they are of a greeniſh colour, tinged in ſome parts with brown.

We have it on chalky hills, flowering in June.

C. Bauhine calls it *Orchis flore nudi hominis formam repreſentante fœmina.* Others, *Orchis Orcades fœmina.*

13. The Fly-Orchis.

Orchis myodes minor.

The root is a double bulb.

The leaves are oblong, broad, and of a duſky green.

The ſtalk is round, ſlender, upright, and a foot high.

The flowers ſtand at the top in a looſe ſpike: they are of a very ſingular form, repreſenting not unaptly the head, body, and wings, of a fly. The upper part of the flower is greeniſh; the lower part repreſenting the body is of a deep duſky brown.

We have it on chalk hills. It flowers in May.

C. Bauhine calls it *Orchis myodes galea et alis herbidis.* Others, *Myodes minor.*

14. The Greater Fly-Orchis.

Orchis myodes major.

The root is a double bulb.

The leaves are broad, ſhort, and of a deep green.

The ſtalk is two feet high, and conſiderably thick.

The flowers ſtand on the top in a looſe ſpike: they are large, and of a duſky colour, paler at the top: they repreſent very aptly ſo many large flies.

We have it in dry paſtures, but not common. It flowers in June.

C. Bauhine calls it *Orchis muſcam referens major.*

15. The Great Bee-Orchis.

Orchis fuciflora major.

The root is a double bulb.

The leaves are oblong, broad, and of a deep green.

The ſtalk is a foot high; and the flowers ſtand at the top in a kind of looſe ſpike.

They are large, and in the higheſt degree ſingular and beautiful: they ſo perfectly repreſent the ſmaller kind of humble bee, that one might ſtrike at them, ſuppoſing them bees ſitting on the plant. The upper part, repreſenting the head, is whitiſh; the ſide-pieces, repreſenting wings, are purpliſh; and the body is brown, variegated in an elegant manner with lines and ſtreaks of yellow.

The colours are in different ſoils ſomewhat uncertain, but the form is conſtant.

We have it in chalk-pits. It flowers in June.

C. Bauhine calls it *Orchis fucum referens major foliolis ſuperioribus candidis et purpuraſcentibus.*

16. The Bee-Orchis, with green wings.

Orchis fuciflora ferruginea.

The root is a double bulb.

The leaves are oblong, and of a deep green.

The ſtalk is a foot high, and at its top the flowers ſtand in a looſe ſpike. They very happily repreſent the common bee: they are hairy, and of a duſky, variegated brown in the body or lower part; and the upper parts, forming the head and wings, are of a pale, greeniſh hue, ſometimes tinged lightly with fleſh-colour or white.

We have it in dry paſtures, flowering in the beginning of May.

C. Bauhine calls it *Orchis fucum referens colore rubiginoſo.*

17. The

17. The Butterfly-Orchis.

Orchis bifolia calcari oblongo.

The root is a double bulb.

The leaves are uſually two: they are oblong, very broad, and of a deep green.

The ſtalk is a foot high, ſlender, and of a pale green.

The flowers ſtand at the top in a long, looſe ſpike; and they are ſmall and white.

They are ſuppoſed to repreſent the form of a butterfly; but there muſt go a great deal of fancy to make that out. The ſpur behind is very long, and there is a pleaſing ſweetneſs in the flowers at evening.

We have it in boggy grounds. It flowers in May.

C. Bauhine calls it *Orchis bifolia altera.* Others, *Orchis hermaphroditica*, and *Pſychodes.*

18. Gnat Orchis.

Orchis bifolia minor.

The root is a double bulb.

The leaves are oblong, broad, obtuſe, and uſually only two in number.

The ſtalk is of a pale green, juicy, and ſix inches high.

The flowers ſtand in looſe ſpikes at the tops of the ſtalks; and are ſmall, white, and of little ſmell: they have been ſuppoſed by ſome to repreſent a gnat; but it is very imperfectly.

C. Bauhine calls it *Orchis bifolia minor calcari oblongo.*

19. Male Handed Orchis.

Orchis palmata mas.

The root is compoſed of two tuberous pieces, divided at the bottom in the manner of fingers. This is what botaniſts call palmated.

The leaves are numerous, broad, of a pale green, and obtuſe.

The ſtalk riſes to two feet in height.

The flowers ſtand in a long ſpike at the top; and are naturally of a fine red, with a tinge of purple.

They are ſometimes white, and the ſpike ſhorter.

Theſe and the like differences riſing from the degree of nouriſhment, have led writers to diſtinguiſh it into ſeveral imaginary ſpecies.

We have it frequent in boggy and wet ground. It flowers in June.

C. Bauhine calls it *Orchis palmata pratenſis latifolia cum longis calcaribus.*

20. Female Handed Orchis.

Orchis palmata famina.

The root is handed.

The leaves are long, broad, of a deep green, and ſpotted with black.

The ſtalk is a foot and half high, and at the top ſtand the flowers in a long cloſe ſpike: they are ſmall, and of a pale red, with a tinge of purple.

It is common in paſtures, and flowers in June.

C. Bauhine calls it *Orchis pratenſis maculata.* Others, *Orchis palmata maculata.*

21. Long ſpurred handed Orchis.

Orchis palmata calcaribus longis.

The root is palmated.

The leaves are oblong, narrow, and of a pale green.

The ſtalk is ten inches high, and juicy.

The flowers ſtand at the top in a long, thick-ſet ſpike; and they are ſmall, and naturally of a very bright red, ſometimes white: they have a fragrant ſmell.

It is not uncommon in our paſtures, and flowers in June.

C. Bauhine calls it *Orchis palmata minor calcaribus oblongis.*

22. Frog-Orchis.

Orchis palmata flore luteo viridi.

The root is palmated.

The leaves are oblong, broad, and of a deep green.

The ſtalk is a foot and half high.

The flowers ſtand at the top in a looſe ſpike; and they are large, and of a ſingular figure, by ſome ſuppoſed to repreſent a frog.

Their colour is a yellowiſh green; and the lower part is ſometimes tinged with purple.

C. Bauhine calls it *Orchis palmata flore viridi.*

23. Dwarf handed Orchis.

Orchis palmata puſilla alba.

The root is palmated.

The leaves are oblong, broad, of a deep green, and obtuſe.

The ſtalk is five inches high, and at its top ſtand the flowers in a looſe, ſmall ſpike: they are white, and, for the ſize of the plant, large.

We have it on our weſtern hills. It flowers in June.

The flowers have a ſweet ſmell.

Ray calls it *Orchis puſilla alba odorata radice palmata.*

24. Great-handed Orchis, with greeniſh, white flowers.

Orchis palmata major flore viridi albente.

The root is palmated.

The leaves are broad, and of a deep green.

The ſtalk is two feet high.

The flowers ſtand at its top in a long, thick ſpike; and are large, and of a whitiſh green.

We have it in damp ground in our northern counties. It flowers in June.

Ray calls it *Orchis palmata thyrſo ſpecioſo.*

25. Scarlet Orchis.

Orchis palmata tota rubra.

The root is palmated.

The leaves are oblong, conſiderably broad, and obtuſe: they riſe firſt of a browniſh green, and ſoon after become of a fine red.

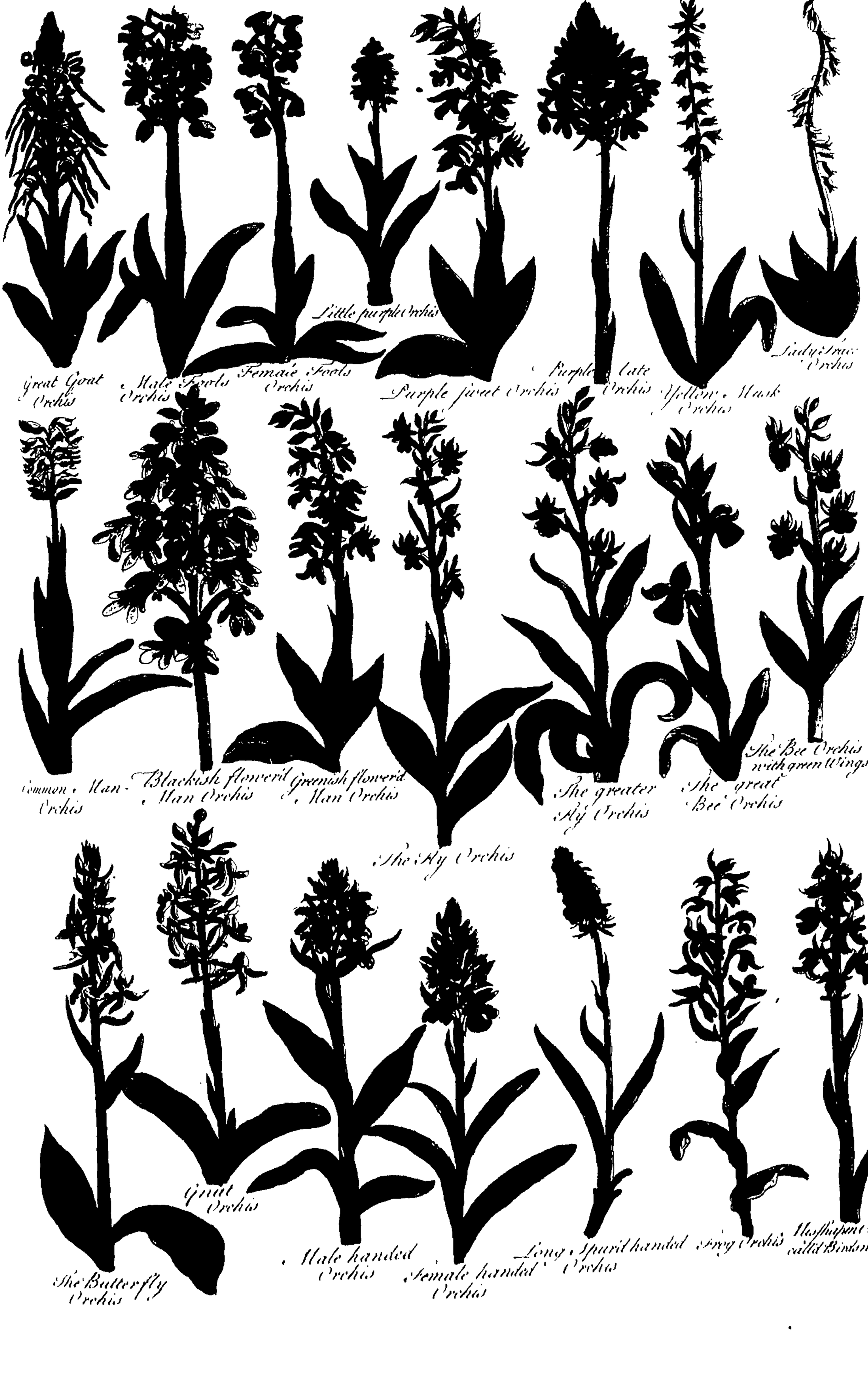
The ſtalk is round, juicy, red, and a foot high.

The flowers are ſmall, numerous, and of a faint purple.

The whole plant, when it has been ſometime in flower, acquires the high red colour of the leaves.

We have it in Eſſex. It flowers in June.

C. Bauhine


Little purple Orchis
Lady's Traces Orchis
Purple late Orchis
Yellow Musk Orchis
Purple Spiral Orchis
Female Fools Orchis
Male Fools Orchis
Great Goat Orchis
The Bee Orchis with green Wings
The great Bee Orchis
The greater Fly Orchis
Greenish flowerid Man Orchis
Blackish flowerid Man Orchis
Common Man Orchis
The Fly Orchis
Great Orchis
Male handed Orchis
Female handed Orchis
Long Spurrid handed Orchis
Long Orchis
Hoofshaped Orchis with Birdsnest
The Butterfly Orchis

C. Bauhine calls it *Orchis palmata paluſtris tota rubra.*

All theſe *orchis's* poſſeſs the ſame virtues: they are ſtrengthening, reſtorative, and, as is ſaid, promote venereal deſires. Salep is the dried root of one of the ſpecies; and they all poſſeſs the ſame qualities. The teſticulated kinds have it in the greateſt degree.

26. Single-rooted Dwarf Baſtard Orchis.

Orchis pumila bifolia radice ſingulari.

The root is a ſingle, round lump, of a browniſh colour.

The leaves are uſually only two; and they are large, broad, waved along the edges, and of a deep green.

The ſtalk is not more than five inches high, and is of a pale green.

The flowers are cluſtered at the top; and they are ſmall, and of a faint red.

We have it in boggy places in Suſſex. It flowers in July.

C. Bauhine calls it *Chamæ-orchis lilliſolia.* Others, *Pſeudo-orchis.*

27. Miſ-ſhapen Orchis, called Birds-neſt.

Orchis abortiva rufa.

The root is compoſed of very numerous, thick fibres, irregularly interwoven with one another, ſo as to repreſent a bird's neſt.

The leaves are oblong, conſiderably broad, and of a browniſh green.

The ſtalk is a foot high, and of a browniſh colour.

The flowers are moderately large, and of a duſky purple; and they are placed in a looſe ſpike at the top of the ſtalk.

When the plant has been ſome time in flower, it becomes throughout of a duſky, purpliſh, brown colour.

We have it in Charleton foreſt, Suſſex. It flowers in July.

C. Bauhine calls it *Orchis abortiva fuſca.* Others, *Nidus avis.* Whence our Engliſh name, *Birds-neſt.*

28. Smaller purple miſ-ſhapen Orchis.

Orchis abortiva minor purpurea.

The root is compoſed of numerous, rediſh fibres, ſtrangely interwoven with one another.

The leaves are ſmall, and of a purpliſh green.

The ſtalk is ten inches high, and is purple.

The flowers ſtand in a ſpike at the top; and they are ſmall, and of a lively crimſon.

We have it in Suſſex under old hedges. It flowers in June.

C. Bauhine calls it *Orchis abortiva violacea*, the whole plant being of a purple tinge.

GENUS IV.

HELLEBORINE.

THE flower is placed upon the rudiment of the ſeed-veſſel, without any cup, and is compoſed of five petals; and there is placed within a nectarium, of an oval form, hollowed at the baſe, and divided at the top into three parts; the middle one of which is heart-faſhioned. The leaves are broad and nervous, and the root is compoſed of interwoven fibres.

Linnæus places this among the *gynandria diandria*; the filaments being two, and inſerted on the piſtil. He takes away the received name, and calls it *ſerapias.*

1. Common Helleborine.

Helleborine latiſolia vulgaris.

The root is fibrous and white.

The ſtalk is round, firm, upright, not at all branched, and two feet high.

The leaves are oblong, broad, of a deep green, and marked lengthway with numerous, high, and thick ribs.

The flowers grow in a kind of ſpike at the top; and are ſmall, and of a greeniſh colour on the outſide, whitiſh within, and ſometimes tinged with purple.

The ſeed-veſſel is oblong, and the ſeeds are ſmall.

We have it in woods. It flowers in Auguſt.

C. Bauhine calls it *Helleborine latifolia montana.*

2. Purple broad-leaved Helleborine.

Helleborine latiſolia flore purpureo.

The root is fibrous and brown.

The ſtalk is firm, round, two feet high, and not branched.

The leaves are oblong, broad, and of a deep green; and they ſtand very frequent on the ſtalks.

The flowers grow in a long, looſe ſpike at the top; and they are throughout of a deep, duſky purple.

We have it in woods, but not common. It flowers in Auguſt.

C. Bauhine calls it *Helleborine altera atro rubente flore.*

3. Small, broad-leaved, white-flowered Helleborine.

Helleborine minor latiſolia flore albo.

The root is fibrous and white.

The ſtalk is a foot high, and not at all branched.

The leaves are broad, ſhort, of a pale green, and highly ribbed.

The flowers ſtand in a ſmall ſpike at the top, and are white.

We have it in woods. It flowers in Auguſt.

C. Bauhine calls it *Helleborine flore albo.* Others, *Helleborine minor.*

The flowers in this ſpecies ſometimes are larger, and keep always ſhut; and in this ſtate it has been deſcribed as a diſtinct ſpecies, under the name of *Helleborine latiſolia flore albo cluſo*; but it is only a variety.

4. Helleborine, with long, ſharp-pointed leaves.

Helleborine ſolio prolongis anguſtis acutis.

The root is compoſed of numerous fibres.

The ſtalk is two feet high, and not branched.

The leaves are long and narrow, ſharp-pointed, and of a dead green.

The flowers ſtand in a looſe ſpike at the top of the ſtalk; and are large, of a longiſh ſhape, white, and tinged on the outſide with green.

We have it in thickets on damp ſoils. It flowers in Auguſt.

Ray calls it *Helleborine foliis prolongis anguſtis acutis.*

5. Marſh-Helleborine.

Helleborine paluſtris.

The root is compoſed of numerous fibres.

The ſtalk is a foot and half high, round, upright, and not branched.

The leaves are broad, and full of thick ribs.

The flowers hang from the top of the ſtalk in a looſe ſpike; and they are purpliſh on the outſide, and white within.

We have it in boggy grounds, but not common.

C. Bauhine calls it *Helleborine anguſtiſolia paluſtris*; but the leaves are not remarkably narrow.

6. Purple, narrow-leaved Helleborine.

Helleborine anguſtiſolia flore purpureo.

The root is compoſed of numerous fibres.

The ſtalk is round, upright, and of a pale green.

The flowers ſtand at the top in a thin ſpike, and droop a little: they are large and purple.

We have it in woods in our northern counties. It flowers in Auguſt.

C. Bauhine calls it *Helleborine montana anguſtifolia purpuraſcens.*

The roots of all theſe kinds are powerfully emetick, poſſeſſing the qualities of *white hellebore.*

GENUS V.

LADY'S SLIPPER.

CALCEOLUS.

THE flower is placed upon the rudiment of the ſeed-veſſel, and has no cup. It conſiſts of five petals when compleat; but one is not unfrequently wanting; and in the midſt of theſe is placed a large, hollow nectarium, ſuppoſed to reſemble a ſlipper. This has at the top a little crooked lip. The leaves are broad and nervous, and the root is fibrous.

Linnæus places this among the *gynandria diandria*, two threads growing on the piſtil.

Lady's Slipper.

Calceolus Mariæ.

The root is compoſed of numerous implicated fibres.

The ſtalk is round, upright, not at all branched, and of a pale green.

The leaves are oblong, and of a yellowiſh green, obtuſe, and marked with very high ribs.

The flower ſtands at the top; and is very large, and of a beautiful yellow.

We have it in woods in our northern counties, but not common. It flowers in Auguſt.

C. Bauhine calls it *Helleborine flore rotundo, ſive Calceolus.*

GENUS VI.

TWYBLADE.

OPHRIS.

THE flower is ſupported upon the rudiment of the fruit, and has no cup. It is compoſed of five petals, two of which are placed outward, the reſt upward; and in the centre of theſe ſtands a nectarium, which hangs down, and is toothed. The leaves are naturally only two; and the root is fibrous.

Linnæus ranges this with the preceding.

1. Common Twyblade.

Ophris vulgaris.

The root is compoſed of numerous fibres, variouſly interwoven.

The ſtalk is round, juicy, and ten inches high.

The leaves are naturally no more than two: they are broad, ſhort, and placed oppoſite to each other at ſome diſtance above the ground.

The flowers ſtand in a long ſpike at the top; and are of a pale greeniſh colour.

It is common on marſhy ground, and flowers in June.

C. Bauhine calls it *Ophris bifolia.* Others, *Bifolium.*

2. Dwarf

2. Dwarf Twyblade.

Ophris minima foliis cordatis.

The root is compoſed of numerous implicated fibres.

The ſtalk is juicy, round, rediſh, and five inches high.

The leaves are only two; they are broad at the baſe, and ſomewhat indented, ſharp at the point, and placed oppoſite.

The flowers are ſmall and whitiſh.

We have it on bogs. It flowers in May.

C. Bauhine calls it *Ophris minima.*

3. Short-ſpiked Twyblade.

Ophris ſpica brevi.

The root is formed of implicated fibres, and ſends out runners under the ſurface.

The ſtalk is round, and eight inches high.

The leaves are broad, and of a fine gloſſy green; and they riſe two, or three ſometimes, from one part of the ſtalk a little above the ground.

The flowers are ſmall and whitiſh; and they form a ſhort ſpike.

It is found on boggy ground, flowering in May.

Ray calls it *Bifolium paluſtre.*

The virtues of theſe plants are not known.

The END of the THIRTIETH CLASS.

THE

THE

BRITISH HERBAL.

CLASS XXXI.

Plants whoſe flower is compoſed of a cup and filaments, without any petals.

THIS is a very large claſs; and there is not in the whole compaſs of the ſcience one better marked, or more obviouſly diſtinguiſhed, to the unprejudiced eye; the want of petals, the gaudy part of a flower, rendering theſe altogether unlike all the others.

Ray has placed them together under the term *apetalous*; and others, who have followed Nature, have feared to ſeparate them. But, in the modern ſyſtem of Linnæus, they are, like the reſt of Nature's alliances, ſcattered over all his works, the *docks* being placed among his *triandria*, and the *atriplex* among the *polygamia monœcia* at the other end of his work. Theſe are the errors againſt which I declare, reſting the objection upon Nature; againſt whom there is no appeal.

SERIES I.

Natives of BRITAIN.

Thoſe of which one or more ſpecies are naturally wild in this country.

GENUS I.

APONOGETON.

THE flowers are of two kinds, male and female, on the ſame plant. The male flower conſiſts of a ſingle filament, terminated by an oval button, not having ſo much as a cup. The female flower has a cup, formed of one leaf, and dented in two places at the edge; in which are placed ſeveral rudiments of ſeeds, crowned with ſimple ſtyles; and both kinds are ſituated in the boſoms of the leaves.

Linnæus places this among the *monœcia monandria*, and gives it the name *Zannichellia*.

Horned Aponogeton.

Aponogeton cornutum.

The root is fibrous, and white.

The ſtalk is round, green, weak, and very much branched.

The leaves are oblong, narrow, numerous, and of a freſh green.

The flowers are ſmall, and greeniſh; and they ſtand in the boſoms of the leaves over the greateſt part of the plant.

It is common in waters, and flowers in July.

Pantedera calls it *Aponogeton aquaticum graminifolium ſtaminibus ſingularibus.*

GENUS II.

LIMNOPEUCE.

THE flowers are of two kinds, male and female, on the ſame plant. The male flower conſiſts of a cup, divided into ſeveral minute pointed ſegments, and a great number of buttons, ſupported on very ſhort filaments. The female flower has the ſame kind of cup with the male, and in it only a rudiment of the future ſeed.

Linnæus places this among the *monœcia polyandria*; the filaments being numerous, and the two kinds of flowers on the ſame plant.

1. Simple-leaved Limnopeuce.

Limnopeuce foliis ſimplicibus.

The root conſiſts of numerous fibres.

The firſt ſhoots from it lie upon the mud, and ſend out more fibres at their joints.

The ſtalks are numerous, round, hollow, and of a faint green.

The leaves encircle them at the joints; and are numerous, ſimple, narrow, and alſo of a pale green.

The flowers are numerous and greeniſh: they ſtand partly at the tops of the ſtalks, and partly in the boſoms of the leaves.

It is common in muddy waters, flowering in Auguſt.

Cordus calls it *Limnopeuce*. Others, *Limnopeuce vulgaris*.

2. Four-horned Limnopeuce.

Limnopeuce foliis quadricornis.

The root is fibrous.

The ſtalks are weak and ſlender, loaded with leaves, and not very erect.

The leaves are placed in cluſters; and are narrow, and armed with four horns. Their colour is a browniſh green.

It is frequent in brooks, and produces its inconſiderable flowers in July.

Ray calls it *Hydroceratophyllon folio aſpero quatuor cornubus armato*. Others, *Millefolium equiſetifolium*.

3. Eight-horned Limnopeuce.

Limnopeuce octo cornubus armata.

The root is fibrous.

The ſtalk is weak, and of a browniſh green.

The leaves are ſoft to the touch; whereas thoſe of the other are harſh, and are armed with eight horns.

The flowers are very ſmall, and greeniſh.

We have it in ponds and rivers, flowering in autumn.

Ray calls it *Hydroceratophyllum læve octo cornubus armato*.

The virtues of theſe plants are altogether unknown.

GENUS III.

PEPPER-GRASS.

PILULARIA.

THE flowers are of two kinds, male and female, upon the ſame plants. The male flower has no cup or petals; but conſiſts of four long, twiſted antheræ, fixed to one common ſubſtance; and theſe grow upon the leaves without footſtalks. The female flower conſiſts of a rudiment of a fruit; which is roundiſh, and afterwards enlarges in ſize, and when ripe is filled with numerous ſeeds in four cells.

Linnæus places this among the *cryptogamia*.

Pepper-Graſs.

Pilularia vulgaris.

The root is ſmall, fibrous, and white.

The leaves are numerous, long, very ſlender, and of a fine green.

The flowers are minute and greeniſh; and the ſeed-veſſels, when ripe, are brown.

It is not uncommon in damp places, but is unobſerved from its likeneſs to graſs.

Ray calls it *Graminifolia paluſtris repens vaſculis granorum peperis æmulis*. Others, *Gramen peperinum*.

GENUS IV.

SEA-PONDWEED.

POTAMOGITON MARITIMUM.

THE flowers are male and female upon the ſame plant. The male flowers conſiſt of ſingle buttons, on very ſhort filaments, arranged together on a pedicle, riſing from the boſom of a leaf, and having no cup. The female flower has no cup. It conſiſts only of a rudiment of a ſeed, ſupported ſingly on a ſlender footſtalk: ſeveral of theſe footſtalks riſe from one common head; and the ſeed, when ripened, is oblong. Of this genus there is but one known ſpecies.

Graſſy Sea-Pondweed.

Potamogiton maritimum foliis gramineis.

The root conſiſts of a few ſmall fibres.

The ſtalks are numerous, ſlender, and branched, and three or four inches in length.

The leaves are narrow, graſſy, numerous, and of a faint green.

The male flowers riſe in catkins from the boſoms of the leaves; and are of a browniſh colour. The female flowers ſtand in a kind of umbells, and are greeniſh.

We have it in the ditches of ſalt-marſhes, flowering in Auguſt.

Ray calls it *Potamogiton maritimum graminei, longioribus foliis, fructu fere umbellato.*

GENUS V.

GLASSWORT.

SALICORNIA.

THE flower is compoſed of a ſquare cup, and a ſingle filament, with a ſimple ſtyle riſing from the rudiment of the ſeed. This is its whole conſtruction. The ſeed afterwards ripens, and the cup ſwells and encloſes it.

Linnæus places this among the *monandria*, his firſt claſs; ſeparating it far from all the other apetalous plants.

1. Jointed Glaſſwort.

Salicornia geniculata.

The root is ſmall and fibrous.

The plant is of a moſt ſingular ſtructure, reſembling ſome of the ſubmarine more than the terreſtrial kinds.

The ſtalk is compoſed of ſhort, thick joints; and is five inches high, and very much branched. The branches divide again, and are jointed more conſpicuouſly than the main ſtalk; and on theſe ſtand the flowers, which are ſmall and whitiſh. The whole plant is naturally of a freſh green, but often red at the lower part, and ſometimes throughout.

It is common in our ſalt marſhes, and flowers in June.

C. Bauhine calls it *Kali geniculatum*. Others, *Salicornia*.

The plant is diſtinguiſhed from all the others by the ſucculency of its branches, and its want of leaves; but there have been three or four varieties of it, ſolely owing to the manner of growth, deſcribed by frivolous writers, as diſtinct ſpecies, under the names of *myoſuroides*, *ramoſior*, and *erecta*. One there is truly diſtinct, which follows.

2. Shrubby Glaſſwort.

Salicornia fruticoſa.

The root is fibrous.

The ſtem is hard, woody, and brown.

The branches are numerous and tender, and they are naturally rediſh.

The flowers are ſmall, and rediſh.

We have it on our ſea-coaſts, flowering in June.

Ray calls it *Kali fruticoſum perenne procumbens.*

The tender branches of the preceding kind are pickled for ſampire; but it is a fraud; and they are much inferior.

GENUS VI.

HOP.

LUPULUS.

THE flowers are of two kinds, male and female, and are produced on ſeparate plants of the ſame ſpecies. The male flower is compoſed of five filaments, placed in a five-leaved cup. The female is formed of a large, oval cup, flatted on one ſide, made of a ſingle leaf, and containing without any filaments a ſingle rudiment of a fruit, with two ſtyles.

Linnæus places this among the *dioecia hexandria*.

The Common Hop.

Lupulus vulgaris.

The root conſiſts of numerous, thick fibres, and ſends out ſpreading ſhoots.

The ſtalks are tough, ſlender, ſtriated, and, when ſupported, riſe to twenty feet.

The leaves are large, broad, of a coarſe green, and beautifully divided, with the ſegments ſerrated.

The male flowers hang from ſome of the plants in brown ſeries. The female, collected into heads, ripen upon others; and theſe are uſed in brewing.

The plant is wild in our hedges, and cultivated in grounds for the ſervice of the brewery.

Its young tops are alſo eatable as aſparagus, and as pleaſant.

C. Bauhine calls it *Lupulus mas et femina.*

GENUS VII.

HEMP.

CANNABIS.

THE flowers are male and female upon ſeparate plants. The male conſiſts of five ſmall filaments, placed in a cup, divided into five ſegments. The female have two ſtyles, placed on the rudiment of the ſeed in a cup that burſts ſideways. The ſeed is encloſed, as it ripens, in this cup.

Linnæus places this among the *diœcia pentandria*.

The Common Hemp.

Cannabis vulgaris.

The root conſiſts of many fibres, connected to an oblong head.

The ſtalk is thick, tough, ſtriated, and four feet high.

The leaves are large, and divided in the manner of fingers, and of a duſky green.

The flowers on the male plants are whitiſh, thoſe on the female of a pale green: theſe laſt only ripen ſeed.

It is wild in Scotland, but ſmall. We cultivate it here in fields for the ſervice of the linnen manufactory. It flowers in July.

C. Bauhine calls it *Cannabis mas et fœmina*.

An emulſion of *hemp*-ſeed has ſingly cured jaundice.

GENUS VIII.

DOGS MERCURY.

CYNOCRAMBE.

THE flowers are of two kinds, male and female, on the ſame plant. The male conſiſt of numerous filaments, in a cup which ſplits into two parts, and thoſe turn back. In the female the cup is of like form; but in it is only a ſingle ſtyle, fixed to the rudiment of a fruit, which, when ripe, is rough, and holds a ſingle ſeed.

Dogs Mercury.

Cynocrambe vulgaris.

The root is fibrous, white, and ſpreading.

The ſtalk is green, round, juicy, and a foot high.

The leaves are placed in pairs; and they are green, freſh, oblong, ſerrated, and pointed.

The male flowers grow at the tops of the ſtalks in ſmall, greeniſh ſpikes.

The ſeeds riſe on ſmall footſtalks in the boſom of the leaves; and are of a teſticulated form.

It is common under hedges, and flowers in April.

C. Bauhine calls it *Mercurialis montana teſticulata*. Others, *Cynocrambe*.

The plant is poiſonous, and has deſtroyed many perſons.

GENUS IX.

FRENCH MERCURY.

MERCURIALIS.

THE flowers are male and female, and they grow on ſeparate plants. The male flower conſiſts of nine filaments, placed in a ſmall cup, cut into three ſegments. The female is compoſed of a like cup, in which are placed two ſtyles upon a rounded germen, and two nectaria at its ſides. The ſeed-veſſel is teſticulated.

Linnæus juſtly ſeparates this from the former. Ray inadvertently joins them as ſpecies of one genus.

French Mercury.

Mercurialis annua glabra.

The root is fibrous.

The ſtalk is a foot high, very much branched, and thick ſet with leaves: theſe are oblong, ſerrated, and of a beautiful green.

The male flowers are greeniſh, and grow in ſlender ſpikes on ſome plants. The female riſe from the boſoms of the leaves in others; and are alſo little and greeniſh.

It is common about hedges, and flowers in May.

C. Bauhine calls it *Mercurialis mas et fœmina*.

GENUS X.

NETTLE:

URTICA.

THE flowers are male and female on the ſame plant. The male flower conſiſts of a four-leaved cup, and four filaments; with an oval, ſmall nectarium. In the female there is only a rudiment of the ſeed, with a rough top, in a cup, ſplit into two parts.

Linnæus places this among the *monæcia tetrandria.*

1. Common Nettle.

Urtica vulgaris.

The root is creeping.

The ſtalk is ridged, a yard high, branched, and beſet with little prickles, at whoſe baſe are bladders of a ſharp, watery juice, which inflames the ſkin, when let in by the puncture of the prickles.

The leaves are large, broad, oblong, ſharp-pointed, ſerrated, and covered with the ſame prickles.

The flowers are greeniſh, and inconſiderable.

It is common by way-ſides, and flowers in July.

The male and female flowers in this genus, I have obſerved, are ſometimes on the ſame, and ſometimes on diſtinct plants.

2. The Leſſer Nettle.

Urtica minor.

The root is fibrous.

The ſtalk is a foot high, not often branched, of a duſky green, and full of ſpines.

The leaves are broad, ſhort, and ſerrated.

The flowers are greeniſh.

It is common about gardens, and flowers in June.

C. Bauhine calls this *Urtica urens minor*; the former, *Urtica urens maxima.*

3. Roman Nettle.

Urtica pilulifera.

The root is fibrous, and creeps.

The ſtalk is ridged, two feet high, and branched.

The leaves are large, oblong, ſerrated, covered with poiſoned ſpines, and of a deep green.

The male flowers are greeniſh, and inconſiderable: the female are ſucceeded by round, large balls, covered with ſpines, and containing the ſeeds.

It is wild in our northern counties, flowering in July.

C. Bauhine calls it *Urtica urens pilas ferens.*

The tops of the *common nettle*, eaten in ſpring, are deobſtruent. The roots are a powerful and excellent diuretick.

GENUS XI.

XANTHIUM.

THE flowers are male and female on the ſame plant. The male flowers are cluſtered together, many in one cover, and conſiſt each of five filaments, placed in a tubular cup, divided at the edge into five ſegments. The female flowers are contained two only in one cup, which is formed of two leaves, each divided into three lobes; the middle one largeſt, and covered with hooked ſpines. The fruit ſucceeding theſe is alſo oblong, and covered with hooked thorns.

Linnæus places this among the *monæcia pentandria.*

Xanthium, called Small Burdock.

Xanthium vulgare.

The root conſiſts of an oblong head, and many fibres.

The ſtalk is ſtriated, purpliſh, branched, and tough.

The leaves are large, and of a pale green, of an oval and ſomewhat cordated form, and ſerrated.

The flowers are ſmall and whitiſh; the fruit is hard, echinated, and of a purpliſh brown.

It grows on the edges of our fen-counties, and flowers in April.

C. Bauhine calls it *Lappa minor Xanthium Dioſcoridis.*

GENUS XII.

DOCK.

LAPATHUM.

THE flower conſiſts of ſix very ſmall filaments, with three ſtyles, placed in a cup compoſed of ſix leaves, three outward, and three inward, all remaining with the ſeed; which is ſingle, and three-cornered.

Linnæus places this among the *hexandria trigynia*, and ſuppoſes the three inner ſegments of the cup, petals.

Common Nettle

Small Narrow-leaved Nettle

Lilium Bulbiferum

Common Hemlock

Short Leaved Lime-tree

Pepper Grass

Jointed Glasswort

Common Hop

Common Hemp

Purple Henbane

French Henbane

Common Mallow

Common Mallow

Great Hedge Nettle

Sharp pointed Dock

Round leaved Dock

DIVISION I. BRITISH SPECIES.

1. Great Water-Dock.

Lapathum aquaticum maximum.

The root is long, thick, and brown.

The ſtalk is thick, purpliſh at the bottom, green upwards, rarely much branched, and five feet high.

The leaves are long, and extremely large, of a fine green, and waved at the edges.

The flowers are greeniſh, and the ſeeds large and brown.

It is common about waters, and flowers in July.

C. Bauhine calls it *Lapathum aquaticum folio cubitali.*

It is celebrated againſt the ſcurvy.

2. Sharp-pointed Dock.

Lapathum folio acuto.

The root is long, thick, brown on the outſide, yellow within, and of a raw, auſtere taſte.

The ſtalk is round, firm, branched, and three feet high.

The leaves are long, large, even at the edges, and ſharp-pointed.

The flowers are greeniſh.

It is common in rich ſoils, and flowers in July.

C. Bauhine calls it *Lapathum folio acuto plano.*

The root is excellent againſt the ſcurvy, much preferable to the *great water-dock:* it is beſt taken in a ſtrong infuſion.

Beſide theſe, our waſte grounds afford not leſs than nine other ſpecies of the *common dock*, not including the ſorrels, which are diſtinguiſhed by their peculiar manner of growing.

In all theſe kinds the flowers, ſeeds, and manner of growth, are the ſame; their principal difference conſiſting in the form of their leaves. We ſhall therefore lay them before the reader in one view, without the interruption of diviſions, into ſeparate articles. They are,

1. The common Dock, *Lapathum vulgare obtuſum.* Diſtinguiſhed by the bluntneſs of its leaves.
2. The curled-leaved, ſharp pointed Dock, *Lapathum acutum criſpum.* Common by waters.
3. The ſmooth, narrow-leaved, ſharp-pointed Dock, *Lapathum acutum anguſtifolium non criſpum.*
4. Dwarf, ſharp-pointed Dock, *Lapathum acutum minimum.* Whoſe flowers ſtand in thick tufts.
5. Green Dock, *Lapathum acutum viride.* In this there are no leaves among the cluſters of flowers.
6. Fiddle-Dock, *Lapathum pulchrum Bononienſe ſinuatum.* Whoſe leaves are hollowed out on each ſide.
7. Golden Dock, *Lapathum anguſtifolium flore aureo.* Whoſe leaves are whitiſh, and the ſeed ſmall.
8. Taller golden Dock, *Lapathum aureum anguſto folio.* Whoſe leaves are very narrow, and ſeeds large.
9. Bloody Dock, *Lapathum ſanguineum.* Diſtinguiſhed by red veins in the leaves.

DIVISION II. FOREIGN SPECIES.

Monks Rhubarb.

Lapathum folio oblongo acuto.

The root is long, very thick, and within of a ſtrong and fine yellow.

The ſtalk is thick, and five feet high, purple at the baſe, green upwards, and branched.

The leaves are very large, oblong, of a deep green, often purpliſh, and have purple footſtalks.

The flowers are very numerous, thready, and whitiſh.

It is a native of Germany and Italy, and flowers in May.

C. Bauhine calls it *Hippolapathum latifolium.*

The freſh root is a purge; and ſome have uſed it in the place of rhubarb: but it is vaſtly inferior.

DOCKS, called SORREL.

THE flowers and ſeeds in the ſeveral kinds of *ſorrel* are of the ſame form with thoſe of the *common docks*; but their different manner of growth, which has obtained them a ſeparate name, demands alſo a peculiar deſcription.

1. Common Sorrel.

Lapathum acetoſum vulgare.

The root is long, ſlender, and hung with ſome fibres.

The ſtalk is a foot and half high, rediſh at the bottom, and not branched.

The leaves have rediſh footſtalks; and they are of a fine freſh green, of an agreeable acid taſte, and of an arrow-headed ſhape.

The flowers are ſmall and rediſh.

It is common in paſtures, and flowers in June.

C. Bauhine calls it *Acetoſa pratenſis.*

It is cooling and debſtruent.

2. Sheeps Sorrel.

Lapathum acetoſum foliis lanceolatis.

The root is fibrous and creeping.

The ſtalk is ſlender, of a pale green, and eight inches high.

The leaves have long, ſlender footſtalks, and they are narrow, and of the ſhape of a ſpear-head; bearded at each ſide, near the baſe.

The flowers are ſmall and yellowiſh.

It is common on dry banks, flowering in June.

C. Bauhine calls it *Acetoſa arvenſis lanceolata.*

Authors have, from the varieties of its growth, idly divided into two ſpecies; as they have deſcribed alſo under the name of a diſtinct ſpecies, the *common ſorrel*, when of a more than ordinary ſtature.

3. Round-leaved Sorrel.

Lapathum acetoſum rotundifolium.

The root is fibrous and creeping.

The firſt leaves have long footſtalks, of a purpliſh tinge; and they are rounded in their general ſhape, but auriculated at the baſe.

The ſtalk is a foot high, ſlender, and of a pale greyiſh green; as are alſo the leaves.

The flowers are ſmall and browniſh.

It is common in our northern counties; and, being cultivated in the rich mould of a garden, becomes the plant called *Roman ſorrel*, or *round-leaved garden-ſorrel.*

Ray calls it *Acetoſa rotundifolia repens.* Others, *Acetoſa Romana.*

GENUS XIII.

BUCKWHEAT.

FAGOPYRUM.

THE flower conſiſts of eight filaments contained, together with three ſtyles, and a nectarium of eight granules, in a cup: this is formed of a ſingle piece, divided into ſegments; which being thin and coloured, appear as petals, but remain with the ſeed, which is large, ſingle, and three-cornered.

Linnæus places this among the *octandria trigynia.*

1. Buckwheat.

Fagopyrum vulgare.

The root is fibrous.

The ſtalks are light, hollow, upright, yellowiſh, and a yard high.

The leaves ſtand ſingly at diſtances: they ſurround the ſtalk at the baſe, and have there two ears, and terminate in a point.

Their colour is a faint, yellowiſh green.

The flowers are white, with a daſh of purple; and they ſtand in tufts at the top of the ſtalk.

The ſeeds are brown.

It is found by road-ſides in ſome places, but probably owing to ſcattered ſeeds, the plant being cultivated for the food of cattle.

C. Bauhine calls it *Eryſimum Theophraſti folio hederaceo.* Others, *Fagopyrum erectum vulgare.*

2. Climbing Buckwheat, called Black Bindweed.

Fagopyrum ſcandens.

The root is fibrous.

The ſtalk is weak, yellowiſh, and a foot in length, climbing round other plants for ſupport.

The leaves are of a triangular form, and heart-ſhaped at the baſe.

The flowers grow in long ſeries, and are of a duſky brown.

It is common in corn-fields, and flowers in June.

C. Bauhine calls it *Convolvulus minor folio triangulo.* Others, *Convolvulus niger*, and *Fagopyrum ſcandens.*

GENUS XIV.

ARSMART.

PERSICARIA.

THE flower conſiſts of eight filaments, and three ſtyles, incloſed in a thick, fleſhy cup, green on the outſide, coloured white or red within, and fleſhy on the hinder part. This is formed of a ſingle piece, imperforate at the baſe, and divided at the edge into five oval ſegments. The ſeed is ſingle, and triangular; and it remains covered by the cup.

Linnæus joins this genus, with the *polygonum*, among the *octandria trigynia.*

1. Biting Arſmart.

Perſicaria vulgaris acris.

The root is fibrous.

The ſtalk is round, thick, jointed, irregularly upright, and a foot and half high.

The leaves are oblong, moderately broad, undivided at the edges, and of a beautiful uniform green all over.

The flowers are collected in ſhort ſpikes at the tops of the ſtalks and branches; and they are of a bright red.

The taſte of the whole plant is very acrid.

It is common in damp places, and flowers in June.

C. Bauhine calls it *Perſicaria urens ſive Hydropiper.* Our people, *Lakeweed*, and *Biting arſmart.*

2. Small creeping Arſmart.

Perſicaria puſilla repens.

The root is fibrous.

The

The ſtalk is round, jointed, and green; a foot high, and not much branched.

The leaves are long, narrow, and of a freſh green.

The flowers ſtand at the tops of the ſtalks and branches in longiſh, but looſe ſpikes; and are of a pale, yellowiſh green.

It is common in watery places, flowering in June.

C. Bauhine calls it *Perſicaria minor*.

Beſide theſe, our fertile ditch banks afford no leſs than eight other ſpecies of *arſmart*. Theſe agree in their form and general manner of growth. The ſtalks are jointed, the leaves oblong and undivided, and the flowers ſpiked in all of them. Their diſtinctions will therefore be familiarly conveyed to the reader in an enumeration, ſuch as we have before given under the *dock* kind, without the repetition of theſe common particulars in them all, in ſo many ſeparate deſcriptions. The ſeveral ſpecies are theſe:

1. Narrow-leaved Arſmart, *Perſicaria anguſtifolia*. This produces ſpikes of flowers from the boſoms of all the leaves.
2. Spotted Arſmart, *Perſicaria mitis maculoſa*. The leaves of this are inſipid, and each has a black ſpot.
3. Hoary Arſmart, *Perſicaria folio ſubtus incano*. The leaves are whitiſh, and rough underneath.
4. Pale-leaved Arſmart, *Perſicaria mitis major foliis pallidioribus*. A very tall plant, with great, pale, ſpotted leaves.
5. Willow-leaved Arſmart, *Perſicaria foliis ſalicis*. The leaves are narrow, long, and ſilvery white.
6. Spotted-ſtalked Arſmart, *Perſicaria latifolia mitis caule maculato*. The ſtalks beautifully variegated with red and purple.
7. Perennial willow-leaved Arſmart, *Perſicaria ſalicis folio perennis*. The leaves very long, and ſpikes thick.
8. Procumbent Arſmart, with leaves ſpotted, and hoary underneath, *Perſicaria maculoſa procumbens foliis ſubtus incanis*.

GENUS XV.

KNOTGRASS.

POLYGONUM.

THE flower conſiſts of eight filaments, three ſtyles, and a three-cornered germen or rudiment of a fruit, placed in a cup, formed of one leaf, divided into five ſegments, and thick, green on the back, and white or rediſh on the inſide. The ſtalks are jointed and procumbent.

Linnæus places this among the *octandria trigynia*.

1. Common Knotgraſs.

Polygonum vulgare.

The root is fibrous.

The ſtalks are numerous, green, jointed, weak, and procumbent; and they have many branches.

The leaves are oblong, of a pale green, obtuſe, and undivided.

The flowers ſtand in their boſoms; and are white, with a tinge of red.

It is common by way-ſides, and flowers in July.

C. Bauhine calls it *Polygonum latifolium*.

The leaves of this plant are ſometimes ſmall and narrow, at others ſhort and broader. This depends upon the place of growth; but, under theſe different appearances, it has paſſed upon botaniſts as two other diſtinct ſpecies, called *brevi anguſto*, and *rotundofolio*.

2. Narrow-leaved Knotgraſs.

Polygonum anguſto et gramineo folio.

The root is fibrous.

The ſtalks are numerous, a foot in length, variouſly branched, weak, and ſcattered over the ground.

The leaves are very narrow, and an inch or two in length; ſo that they appear graſſy.

The flowers are ſmall and whitiſh.

It is common in waſte grounds, flowering in June.

C. Bauhine calls it *Polygonum anguſto et oblongo folio*.

3. Sea-Knotgraſs.

Polygonum maritimum.

The root is fibrous.

The ſtalks are numerous, and ſpread upon the ground.

The leaves are ſmall, oblong, and of a greyiſh green.

The flowers are large and white.

We have it on our ſea-coaſts, flowering in May.

C. Bauhine calls it *Polygonum marinum majus*.

All the ſpecies are aſtringent. A decoction of the *common knotgraſs* is excellent againſt looſeneſſes with bloody ſtools.

GENUS XVI.

BISTORT.

BISTORTA.

THE flower is compoſed of five ſmall filaments, with three ſtyles, contained in a coloured cup. This is formed of a ſingle piece, imperforate at the baſe, and at the verge divided into five oval ſegments, which naturally cloſe together. After this comes a three-cornered ſeed, upon which the cup cloſes and ſurrounds it.

Linnæus places this among the *octandria trigynia*; the ſtyles being three, and the filaments eight, in each flower.

1. Common Biſtort.

Biſtorta vulgaris.

The root is thick, and irregularly ſhaped, brown on the ſurface, and red within.

The leaves have long, red footſtalks; and are oblong, broad, and of a fine green.

The ſtalk is jointed, of a pale green, and two feet high.

The leaves on it reſemble thoſe from the root.

The flowers are of a fine fleſh-colour, and ſtand in a thick ſpike.

It is found in meadows, and flowers in June.

C. Bauhine calls it *Biſtorta radice minor intorta.* Others, *Biſtorta vulgaris.*

The root is good againſt fluxes of all kinds dried and powdered.

2. Leſſer Biſtort.

Biſtorta minor.

The root is oblong, thick, and of an irregular form.

The ſtalk is round, jointed, and a foot high.

The leaves are long and narrow, and of a deep green.

The flowers ſtand in a long ſpike at the top of the ſtalk; and are of a fine fleſh-colour.

We have it in Yorkſhire. It flowers in June

C. Bauhine calls it *Biſtorta Alpina minor.*

3. Various-leaved Biſtort.

Biſtorta foliis rotundis et oblongis.

The root is thick and brown.

The firſt leaves are roundiſh, and ſerrated at the edges; and have long footſtalks.

The ſtalk is four inches high.

The leaves on it are ſlender, and the flowers ſtand in a ſhort ſpike.

We have it on our northern mountains. It flowers in June.

Ray calls it *Biſtorta minima foliis imis ſubrotundis.*

GENUS XVII.

PONDWEED.

POTAMOGITON.

THE flower has no petals. The cup is compoſed of four ſmall, oval leaves, obtuſe at the ends; and is ſucceeded by four ſeeds, of a roundiſh form, but ſwelling one ſide, and pointed.

Linnæus places this among the *tetrandria tetragynia*; the flower having four threads, and four ſtyles.

1. Broad-leaved Pondweed.

Potamogiton latifolium.

The root is compoſed of long fibres, connected to a ſhort head.

The ſtalk is weak, brown, and two feet or more in length, partly immerſed in water, and partly lying on it.

The leaves under water are narrow; thoſe on the top broad, oval, and high ribbed.

The flowers are ſmall and whitiſh; and they ſtand in long, ſlender ſpikes.

It is common in waters, flowering in Auguſt.

C. Bauhine calls it *Potamogiton rotundifolium.*

2. Perfoliate Pondweed.

Potamogiton perfoliatum.

The root is fibrous.

The ſtalk is round, and two feet or more in length, but naturally grows under water.

The leaves are of an oval form, and ſurround the ſtalk at the baſe.

The flowers ſtand in ſlender ſpikes, riſing from their boſoms.

It is common in rivers, flowering in July.

C. Bauhine calls it *Potamogiton foliis latis ſplendentibus.*

3. Oak-leaved Pondweed.

Potamogiton quercus foliis criſpis.

The root is fibrous.

The ſtalk is weak, and eight inches long, and grows under water.

The leaves are very beautiful, of a browniſh green, oblong, obtuſe, and waved at the edges.

The flowers grow in ſlender ſpikes from their boſoms, and are whitiſh: theſe alſo reſemble the flowers of the oak.

It is common in ſhallow waters, flowering in July.

C. Bauhine calls it *Potamogiton foliis criſpis ſive Lactuca ranarum.*

Beſide theſe, there are no leſs than fifteen other Engliſh ſpecies of *pondweed*; the general form of which being the ſame, we ſhall avoid the repetition of ſo many deſcriptions, and give their names and characters.

1. Long, pellucid-leaved Great Pondweed, *Potamogiton foliis anguſtis ſplendentibus.* Diſtinguiſhed by the length of the leaf.
2. Graſſy Pondweed, *Potamogiton folio anguſto pellucido fere gramineo.* Smaller than the former, and the flowers larger.
3. Heart leaved Pondweed, *Potamogiton folio cordato.* Deeply divided at the baſe of the leaf.
4. Frog's Lettuce, *Potamogiton medium lucens*, whoſe leaves grow in pairs, and are obtuſe.
5. Flat-ſtalked, graſſy Pondweed, *Potamogiton caule compreſſo folio graminis canini.* The leaves have no footſtalks.
6. Broader-leaved, flat-ſtalked Pondweed, *Potamogiton gramineum latifolium.* The leaves have obſcure footſtalks.
7. Cluſter-leaved, graſſy Pondweed, *Potamogiton gramineum latius foliis et ramis ſtipatis.*
8. Serrated Graſſy Pondweed, *Potamogiton foliis gramineis ſerratis latioribus caulis.*
9. Harſh-leaved Graſſy Pondweed, *Potamogiton foliis gramineis rigidis.* A large plant.
10. Great-headed Pondweed, *Potamogiton maritimum grandi ſpicis capitatis.* The leaves are very narrow.
11. Fennel-leaved Pondweed, *Potamogiton millifolium.* The leaves are very narrow, and finely divided.
12. Dwarf Graſſy Pondweed, *Potamogiton puſillum gramineo folio caule teretiſ.* The roundneſs of the ſtalk diſtinguiſhes this.
13. Broad, thin-leaved Pondweed, *Potamogiton foliis tenuibus pellucidis.* The leaves have long, brown footſtalks.
14. Feather-leaved Pondweed, *Potamogiton foliis pennatis.* The flowers grow in long, ſlender interrupted ſpikes.
15. Dwarf feathered Pondweed, *Potamogiton pennatum minus.* Smaller, and more branched than the former.

From this detail of their differences, the ſtudent will much more readily comprehend the ſeveral ſpecies than if they had been ſeparated under ſo many diſtinct heads, and encumbered with repetitions; for the flowers are of the ſame form and colour in all, and the general manner of growth in nothing different.

GENUS XVIII.

ORACH.

ATRIPLEX.

THE flowers are of two kinds, hermaphrodite and female, on the ſame plant. The hermaphrodite flower conſiſts of a cup, formed of five membranaceous leaves, with filmy edges, and enclofing afterwards a ſingle ſeed. The female flower conſiſts of a cup, formed only of two leaves; which are of an oval form, large, and compreſſed. Theſe afterwards ſerve to defend alſo a ſingle ſeed.

Linnæus places this among the *polygamia monœcia*; the ſeeds being ripened in two ways on the ſame plant, from hermaphrodite and female flowers.

Spear-pointed Orach.
Atriplex vulgaris folio haſtato.

The root is fibrous.

The ſtalk is upright, two feet high, branched, and of a pale green.

The leaves are oblong, broad, and of a pale green, very broad toward the baſe, and terminated by a large triangular point, like the head of a ſpear.

The flowers are ſmall, and whitiſh.

It is common in cultivated ground, and flowers in June.

C. Bauhine calls it *Atriplex ſylveſtris altera.* Others, *Atriplex folio deltoide.*

Beſide this, there are no leſs than thirteen other ſpecies of *wild orach*, common on our dunghills; and ſome others of the *blite* kind, which are alſo called by the name *orach*, the diſtinction not having been obvious to the earlier writers. We ſhall explain that under the next genus; and ſhall here, as in the preceding article, enumerate the ſpecies, with their eſſential and diſtinctive parts; the general aſpect being in common. This, which we begin in recounting the leſs conſpicuous and leſs uſeful plants, muſt be continued when we give the reader an idea of the graſſes, moſſes, and muſhrooms; articles which have ſingly furniſhed the ſubject of volumes in folio; but which we ſhall compriſe in a ſufficient view in the few remaining numbers of this work.

The ſpecies of *orach* here to be enumerated are theſe:

1. Narrow-leaved Orach, *Atriplex anguſto oblongo folio.* The flowers are very numerous.
2. Narrow-leaved Sea Orach, *Atriplex maritima anguſtifolia dentata.* The leaves are indented and bluiſh.
3. Jagged, narrow-leaved Orach, *Atriplex anguſtifolia laciniata.* The leaves deeply cut, and of a pale green.
4. Perennial Sea-Orach, *Atriplex maritima perennis folio deltoide.* The leaves of a bluiſh green.
5. Tall Sea-Orach, *Atriplex maritima procerior.* The leaves are deeply cut, greyiſh, and hoary.
6. Auriculated Sea-Orach, *Atriplex maritima ad Baſin auriculata.* This is a procumbent plant.

7. Jagged Sea-Orach, *Atriplex maritima laciniata.* The plant is ſmall, and the leaves are hoary.
8. Baſil-leaved Sea-Orach, *Atriplex maritima ocymi minoris folio.* The leaves ſmall, and roundiſh.
9. Broad-cup'd Sea-Orach, *Atriplex maritima ſemine lato* It is a ſmall upright plant.
10. Orach, called Sea-Purſlain, *Atriplex fruticoſa halimus dicta.* A ſhrubby plant, with grey, oblong leaves.
11. Narrow, cluſter-leaved Sea-Orach, *Atriplex maritima ſcopariæ folio.* The leaves very ſmall and narrow.
12. Long, narrow-leaved Sea-Orach, *Atriplex maritima longiſſimo graminis folio.*
13. Narrow, obtuſe-leaved Orach, *Atriplex maritima folio angusto obtuſo.* The leaves are of a bluiſh green.

GENUS XIX.

BLITE.

BLITUM.

THE flower has no petals. It conſiſts of a five-leaved cup, with its filaments, and the rudiment of the fruit: the leaves of it are oval, and edged with a thin, membranaceous ſubſtance. The ſeed is ſingle; and the cup cloſes about it, ſerving as a capſule, and being marked with five ridges.

Linnæus ſeparates this from the *atriplex*, placing it among the *pentandria*, the filaments in the flower being five.

1. Blite, called Common Orach.

Blitum atriplex ſylveſtris dictum.

The root is fibrous.

The ſtalk is a yard high, branched, and of a pale green.

The leaves are oblong, and deeply ſinuated; and they are alſo of a pale green.

The flowers are ſmall, and of a greeniſh white.

It is common on dry ſoils, flowering in Auguſt.

C. Bauhine calls it *Atriplex ſylveſtris folio ſinuato candicante.* Others, *Atriplex ſylveſtris vulgaris.*

2. Stinking Orach.

Blitum fœtidum.

The root is fibrous.

The ſtalks are a foot long, weak, branched, and of a greyiſh colour.

The leaves have long footſtalks; and they are of a roundiſh, but ſomewhat angulated form.

The flowers are ſmall and greeniſh.

The whole plant is covered with a kind of greyiſh powder, and is of an extremely diſagreeable ſmell.

It is common on dry banks, and flowers in July.

C. Bauhine calls it *Atriplex ſylveſtris fœtida.* Others, *Blitum fœtidum*, and *Atriplex olida.*

A conſerve of its freſh tops is good againſt hyſterick complaints. The other kinds have little virtue.

3. Upright Blite, called Allſeed.

Blitum erectum polyſpermon.

The root is fibrous.

The ſtalk is rediſh, upright, and a foot and half high.

The leaves have ſlender footſtalks; and they are oblong, obtuſe, and of a duſky green.

The flowers are ſmall, greeniſh, and very numerous.

It is common in waſte grounds, and flowers in Auguſt.

C. Bauhine calls it *Blitum polyſpermum.*

4. Engliſh Mercury.

Blitum mercurialis Anglica dictum.

The root is fibrous.

The ſtalk is ribbed, of a pale green, branched, and a foot and half high.

The leaves have long footſtalks; and they are of a yellowiſh green, and of an arrow-headed ſhape.

The flowers are ſmall and greeniſh.

The whole plant is covered with greyiſh, fatty duſt.

It is common in paſtures, and flowers in June.

C. Bauhine calls it *Lapathum unctuoſum.*

It is eaten boiled, and is very wholeſome.

Beſide theſe four, which are the ſpecies of *blite* moſt diſtinct, there are fifteen others, natives of England; and theſe we ſhall enumerate as under the preceding kinds, diſtinguiſhing them by their proper characters.

1. Gooſe-foot, *Blitum pes anſerinus dictum.* This is robuſt, full of branches, and with large, broad, ſinuated leaves.
2. Narrow-leaved Gooſe-foot, *Blitum pes anſerinus dictum acutiore folio.* The leaves deeper cut, and ſharp-pointed.
3. Long-ſpiked Gooſe-foot, *Blitum ſinuatum ſpicatum.* The ſpikes of flowers very long, and the leaves pale.
4. Pointed-leaved Gooſe-foot, *Blitum folio in longiſſimum mucronem procurrente.* The leaves very beautiful.
5. Procumbent Blite, with thick, ſinuated leaves, *Blitum procumbens folio ſinuato lucido craſſo.*
6. Small, narrow-leaved, jagged Blite, *Blitum minus anguſtifolium laciniatum.* The ſeed ſmall.
7. Serrated leaved Blite, *Blitum chryſanthemi folio.* The leaves bluiſh, and deeply ſerrated.
8. Fig-leaved Blite, *Blitum ficus folio.* The leaves very deeply divided into three parts in a fingered manner.
9. Round-leaved Blite, *Blitum folio ſubrotundo.* The leaves broad, obtuſe, and rounded.
10. Triangular, ſerrated leaved Blite, *Blitum folio*

folio triangulari dentato. The leaves of a deep green.

11. Cluſtered Blite, with undivided leaves, *Blitum racemoſum foliis integris.* The flowers ſmall.
12. Small, olive-leaved Blite, *Blitum craſſo olio-folio.* A ſmall upright plant.
13. Sea-Blite, called White Saltwort, *Blitum kali minus album dictum.* A branched, ſmall plant.
14. Sea-Blite, called Shrub Stone Crop, *Blitum vermicularis frutex dictum.* Shrubby, and branched.
15. Great Sea-Blite, called Tree Stone Crop, *Blitum vermicularis frutex dictum majus.* Very much branched.
16. Small, red Blite, *Blitum rubrum minus.* Small, with oblong leaves, and large flowers.

GENUS XX.

BEET.

BETA.

THE flower conſiſts only of a cup, and the organs of impregnation. The cup has five oval and obtuſe leaves. The ſeed is contained in a brittle capſule, placed in the bottom of the cup.

Linnæus places this among the *pentandria digynia*; the flower having five filaments, and two ſtyles.

Wild Sea-Beet.

Beta ſylveſtris maritima.

The root is long, thick, and perennial.

The leaves are oblong, broad, obtuſe, of a whitiſh green, and placed on long foorſtalks.

The flowers ſtand at the tops of the ſtalks, which are a yard high, and divided into many branches; and they are ſmall and white.

It is common on our ſea-coaſts, and flowers in Auguſt.

C. Bauhine calls it *Beta ſylveſtris maritima*; a name others have copied.

GENUS XXI.

PELLITORY OF THE WALL.

PARIETARIA.

THE flowers are of two kinds, hermaphrodite and female, on the ſame plant. Two hermaphrodite flowers are contained in a common cup; which is formed of ſix leaves; two of which, placed oppoſite, are much larger than the others. Each of theſe hermaphrodite flowers is formed of a cup, divided into four parts, which afterwards lengthens, ſwells out, and encloſes the ſeed. The female flowers are placed ſingly between two of the others, all contained in the common cup: they are of the ſame form with the others, and in the ſame manner ſurround the ſeed, but leſs conſpicuouſly.

Linnæus places this among the *polygamia monœcia*.

Pellitory of the Wall.

Parietaria vulgaris.

The root is fibrous, and rediſh.

The ſtalks are numerous, rediſh, brittle, jointed, and a foot in length.

The leaves ſtand very thick upon them; and are oblong, and of a duſky green.

The flowers are ſmall and inconſiderable.

It is common on walls, and flowers in June.

C. Bauhine calls it *Parietaria officinarum et Dioſcoridis.*

An infuſion of the whole plant works powerfully by urine, and is excellent againſt the gravel.

GENUS XXII.

GOLDEN SAXIFRAGE.

SAXIFRAGA AUREA.

THE flower has no petals; but the cup is coloured, and reſembles them: it is formed of a ſingle piece, divided into four ſegments, two larger and two ſmaller. The ſeed-veſſel is ſmall, and has two beaks: this ſtands encloſed in the cup, and contains numerous ſeeds.

Linnæus places this among the *octandria digynia*; the threads being eight, and the ſtyles two, in each flower.

Common Golden Saxifrage.

Saxifraga aurea vulgaris.

The root is fibrous.

The ſtalks are numerous, weak, ſlender, of a pale green, and ſix inches high.

The leaves are rounded, but indented at the baſe, of a beautiful green, with ſhort footſtalks.

The

The flowers are very numerous, very small, and of a gold yellow.

It is common in woods, and flowers in April.

C. Bauhine calls it *Saxifraga rotundifolia aurea.*

An infusion of it is gently diuretick.

The leaves of this plant sometimes have the footstalks a little longer; and in that state it has been described as a distinct species.

GENUS XXIII.

ASARABACCA.

ASARUM.

THE flower has no petals. It consists of a cup, which is formed of one piece, hollow, and divided into three segments at the edge, of a bell-like form, coloured, tough, and permanent. The seed-vessel is of a tough substance. It is contained within the substance of the cup; and is divided into six cells, with numerous seeds in each.

Linnæus places this among the *dodecandria monogynia*; the threads being twelve in each flower, and the style single.

Asarabacca.

Asarum.

The root creeps just at the surface of the ground.

The leaves are roundish, but indented deeply for the stalk, and of a fine green.

The flowers grow close to the ground; and are of a greenish colour, more or less tinged with purple. This constitutes the whole plant, for there is no rising stalk.

It is found in our northern woods, flowering in April.

All authors call it *Asarum.*

The root is a very rough vomit; but its juice, and the powder of the whole plant, are useful to promote sneezing, and draw humours from the head.

GENUS XXIV.

LADY'S MANTLE.

ALCHEMILLA.

THE flower has no petals. The cup is formed of one leaf: it is of a campanulated shape, and divided into eight segments, alternately larger and smaller. The seed is single, and contained in the cup.

1. Common Lady's Mantle.

Alchemilla vulgaris.

The root is composed of numerous fibres.

The stalks are round, not very upright, branched, and a foot in length.

The leaves are extremely beautiful: they are of a roundish form, divided into many pointed segments at the edges, and folded.

Their colour is a deep green, with a tinge of yellowish.

The flowers grow in tufts at the tops of the branches; and are yellowish and small.

It is common in our southern counties, flowering in May.

C. Bauhine calls it *Alchemilla vulgaris.*

2. Cinquefoil Lady's Mantle.

Alchemilla Alpina pentaphyllea.

The root is fibrous.

The stalks are numerous, weak, and branched: they are of a silvery white.

The leaves are placed on long footstalks, five on each; and they are of a dark green on the upper side, and of a silvery white underneath.

The flowers are small and whitish.

We have it on our northern mountains, flowering in April.

C. Bauhine calls it *Tormentilla Alpina folio sericeo.* Others, *Alchimilla pentaphyllea.*

3. Parsley Piert.

Percepier.

The root is slender.

The stalks are weak, whitish, crowded with leaves, and three inches high.

The leaves are broad, short, deeply intended, and of a greyish green.

The flowers stand in the bosoms of the leaves, and are very small and whitish.

It is common in plowed fields, and flowers in May.

C. Bauhine calls it *Chærophyllo non nihil accedens.* Others, *Percepier Anglorum.*

It is a powerful diuretick, and good in the gravel.

4. Prickly Glasswort.

Kali cochleatum.

The root is fibrous.

The stalks are numerous and branched, brown, and eight inches high.

The leaves are oblong, and of a dusky green; and in their bosoms stand clusters of young ones, which are smaller, and prickly at the ends.

The flowers are minute and whitish; and the seed is hollow, and twisted.

C. Bauhine calls it *Kali spinosum cochleatum.* Others, *Tragon*, and *Tragon Matthioli.*

Common Sorrell. Sheeps Sorrell. Round leavid Garden Sorrell. Buckwheat. Climbing Buckwheat. Wild black Bindweed. Biting Arsmart.

Common Knot grass. Small Creeping Arsmart. Sea Knotgrass. Common Bistort. Lesser Bistort. Broad leavd Pondweed.

Purpleade Pondweed. Oak leavd Pondweed. Common Wild Orach. Stinking Orach. Upright Blite called Allseed.

English Mercury. Pellitory of the Wall. Golden Saxifrage. Hemlock. Common Lady's Mantle.

Parsley Piert. Prickly Glasswort. Germain Knotgrass. Verticillate Knotgrass. Rupture Wort.

J. Smith sc.

GENUS XXV.

KNAWEL.

SCLERANTHUS.

THE flower conſiſts of a cup, formed of a ſingle piece, divided into five pointed ſegments, and containing the filaments and piſtil. The ſeed-veſſel is of an oval form, very thin, and contains two ſeeds.

Linnæus places this among the *decandria digynia*; the filaments being ten, and the ſtyles two in the flower.

1. Germen Knotgraſs, or Knawel.
Scleranthus tenuifolius.

The root is fibrous and white.

The ſtalks are numerous, three inches high, and branched.

The leaves are narrow, oblong, and of a pale green.

The flowers are ſmall and whitiſh; and they are placed in the diviſions of the branches.

We have it in dry barren paſtures. It flowers in June.

C. Bauhine calls it *Polygonum anguſtiſſimo folio minus.*

2. Great-flowered Knawel.
Scleranthus flore majore.

The root is long, perennial, and full of fibres.

The ſtalks are eight inches high, beautifully divided into branches, and a little hoary.

The leaves are oblong and narrow.

The flowers are large, and ſtand at the tops of the branches, and in the boſoms of the leaves.

We have it in barren paſtures. It flowers in June.

Ray calls it *Knawel incanum flore majore perenne.*

The earlier writers were not acquainted with it.

GENUS XXVI.

VERTICILLATE KNOTGRASS.

CORRIGIOLA.

THE flower has no petals. The cup is formed of a ſingle piece, divided into five narrow ſegments, hairy at the ends, and is of a pentangular form. The ſeed-veſſel is roundiſh, and the ſeed is large.

Linnæus places this among the *pentandria digynia*; the filaments being five, and the ſtyle, though ſingle, ſplit at the top.

1. Verticillate Knotgraſs.
Corrigiola vulgaris.

The root is fibrous.

The ſtalks are numerous, and weak, three inches long, and of a pale green.

The leaves are ſhort, broad, of a pale green, and hairy.

The flowers are ſmall, and white: they are placed in cluſters round the ſtalks, in the manner of thoſe in the verticillate plants.

We have it in the weſt of England toward the ſea. It flowers in July.

C. Bauhine calls it *Polygala repens nivea.* Others, *Corrigiola.*

2. Thick-leaved Verticillate Knotgraſs.
Corrigiola folio craſſo.

The root is very long and ſlender.

The ſtalks are weak, branched, of a pale green, and four inches high.

The leaves are ſmall, rounded, thick, and of a ſhining green.

The flowers are ſmall and white.

It is found on our ſea coaſts, and flowers in June.

Ray calls it *Polygonum maritimum longius radicatum.*

It is common on our ſea-coaſts, and flowers in July.

C. Bauhine calls it *Polygonum minus, ſeu Millegrana minor.*

It is ſometimes lightly hairy, and has been conſidered in that ſtate as a diſtinct ſpecies; but this is no more than an accidental variety.

It is an aſtringent, but not uſed in medicine.

GENUS XXVII.

RUPTUREWORT.

HERNIARIA.

THE flower has no petals. The cup is formed of a ſingle piece, divided into five pointed ſegments, which ſpread open. The ſeed-veſſel is ſmall, and remains in the baſe of the cup; and the ſeed is ſingle and ſmall.

Rupturewort.
Herniaria vulgaris.

The root is long and ſlender.

The ſtalks trail upon the ground, and are three or four inches long.

The leaves are ſmall, oblong, broad, and of a yellowiſh green.

The flowers are very numerous, and greeniſh: they ſtand at the joints with the leaves.

It is common on our ſea-coaſts, and flowers in July.

C. Bauhine calls it *Polygonum minus, ſeu Millegrana minor.*

It is ſometimes lightly hairy, and has been conſidered in that ſtate as a diſtinct ſpecies; but this is no more than an accidental variety.

It is an aſtringent, but not uſed in medicine.

The END of the THIRTY-FIRST CLASS.

THE

BRITISH HERBAL.

CLASS XXXII.

Plants whoſe roots are fibrous or irregular; whoſe leaves long, narrow, and without footſtalks; and whoſe flowers ſmall and inconſiderable.

THIS comprehends the gramineous herbs, graſſes, corn, and the like; a ſeries of plants perfectly and obviouſly connected together by Nature, and as diſtinctly ſeparated by their characters from all others: but modern botany diſclaims thoſe marks impreſſed by the Creator; and, claſſing all vegetables by their more minute parts, ſeparates ſome of theſe from the others, and unites in the ſame claſs with the generality of them *valerian* and the *tamarind-tree*.

SERIES I.

BRITISH GENERA.

Thoſe of which one or more ſpecies are native of this country.

GENUS I.

WHEAT.

TRITICUM.

THE cup holds three flowers, and is formed of two valves, of an oval, obtuſe figure. The flower is formed of two valves, the outer one ſwelled, and the inner plain. The grain is large.

Linnæus places this among the *triandria digynia*; the threads in the flower being three, and the ſtyles two.

1. Common Wheat.

Triticum vulgare.

The root is fibrous.

The ſtalk is hollow, jointed, and five feet high.

The leaves are graſſy, and of a fine green.

The ear is long and large, and naked.

We find it wild from ſcattered ſeeds.

C. Bauhine calls it *Triticum Hybernum*.

2. Bearded Wheat.

Triticum ariſtatum.

The root is fibrous.

The ſtalk is a yard high, hollow, and jointed.

The leaves are of a ſtrong green, and graſſy.

The ear is long, thick, and bearded.

We have it wild, as the former, only from ſcattered ſeeds.

Beſide theſe, there are five other ſpecies of *wheat* cultivated in our fields, with many varieties.

The deſcriptions of all theſe muſt be the ſame with thoſe of the preceding, in root, ſtalk, and leaf. We ſhall therefore only enumerate them by their names, expreſſing the articles wherein they differ. They are,

1. Red Wheat, *Triticum ſpica et grano rubentibus.* The ear of this is larger and heavier than the common.

2. White

2. White Wheat, *Triticum ſpica et granis albis.* The ear and corn in this are larger than in the common.
3. Cone Wheat, *Triticum ſpica villoſa quadrata longiore ariſtis munita.* The ear very rough.
4. Grey Wheat, *Triticum ariſtatum ſpica maxima cineritia glumis birſutis.* The ear of a greyiſh brown.
5. Polonian Wheat, *Triticum majus longiore grano glumis foliaceis incluſo.* The corn very long.
6. Many-eared Wheat, *Triticum ſpica multiplici.* In this kind four or more ears grow on one ſtalk.
7. Summer Wheat, *Triticum trimeſtre.* The corn ſhort and full, and the growth only three or four months.
8. Barley-ſpiked Wheat, *Triticum ſpica hordei.* The grain is perfect wheat, but the form of the ear like barley.

GENUS II.

RYE.

SECALE.

THE cup holds two flowers, and is formed of two ſmall, narrow pointed leaves, placed oppoſite. The flower is compoſed of two valves: the outer one is ſwelled, firm, and compreſſed; the inner one is lanceolated, and plain. The grain is large.

Common Rye.
Secale vulgaris.

The root is fibrous.
The ſtalk is hollow, jointed, and four feet high.
The leaves are graſſy, and of a pale green.
The ſpike is oblong and rough.

We have it wild only from ſcattered ſeeds, as the former.

C. Bauhine calls it *Secale Hybernum vel majus:* Others, *Secale vulgare.*

A variety of this, with a ſmaller and more ſlender ear, is ſown in ſpring, and thence called by authors *Secale vernum.*

GENUS III.

BARLEY.

HORDEUM.

THE cup holds three flowers; and is formed of ſix narrow and ſharp-pointed leaves, two under every flower. The flower is compoſed of two valves: the under one is ſwelled, and angulated, and ends in a long awn: the upper one is ſmaller, plain, and lanceolated.

Linnæus places this among the among the *trigynia.*

Common Barley.
Hordeum vulgare.

The root is fibrous.
The ſtalk is round, hollow, jointed, and three or four feet high.
The ear is long, thick, and bearded with long, rough, and ſharp awns.
We have it only wild, as the other, from ſcattered ſeeds.

C. Bauhine calls it *Hordeum diſtichum.* Others, *Hordeum vulgare.*

There are two other ſpecies:

1. Sprat Barley, *Hordeum diſtichum ſpica breviore latiore granis confertis.* The ear very ſhort and broad.
2. Square Barley, *Hordeum polyſtichum.* In the ears of this there are, inſtead of two, ſix rows of grains.

GENUS IV.

OAT.

AVENA.

THE cup contains many flowers; and is formed of two large, ſwelled, and pointed valves. The flower is compoſed of two valves: the lower one is ſwelled, oblong, edged, and ſends from its back a crooked awn.

Common Oat.
Avena vulgaris.

The root is fibrous.
The ſtalk is hollow, jointed, and a yard high.
The leaves are long, narrow, and of a pale green.

The flowers are collected in a looſe panicle, and terminate the ſtalk.

It is wild, as the others, from ſcattered ſeeds.

C. Bauhine calls it *Avena alba.* Others, *Avena vulgaris.*

There are beſide this ſix other kinds of *oat*,

wild or cultivated in England, distinguished by the following names.

1. Scotch Oat, *Avena alba Scotica semine simplici pediculo laxo pendente.* The corn small and long.
2. Black Oat, *Avena nigra.* Distinguished sufficiently by the colour, and needing no description.
3. Blue Oat, *Avena cærulea.* Distinguished also by the colour, and sown principally in Yorkshire.
4. Brown Oat, *Avena fusca vel rubra.* The grain large, and very thick in the middle.
5. Naked Oat, *Avena nuda.* Distinguished by wanting the awn; sown principally in Cornwall.
6. Bearded wild Oat, *Ægilops sive avena spicata.* Wild in our corn, with great panicles.

GENUS V.

DOGS GRASS.

GRAMEN CANINUM.

THE cup contains three flowers; and is formed of two valves, of an oval figure, and obtuse. The flower is composed of two valves: the outer one swelled, and large; the other plain and small. The seeds are small; and they are arranged in a long, thin spike.

Linnæus places this among the *triandria.*

Common Dogs Grass.

Gramen caninum vulgare.

The root is slender, and creeping.

The stalk is hollow, jointed, and two feet and a half high.

The leaves are long, narrow, and of a fine green.

The ear is long, and slender.

It is universal in cultivated ground; the torment of farmers and gardeners. It flowers in July.

C. Bauhine calls it *Gramen caninum vulgare, seu Gramen Dioscoridis.*

The root is a powerful and excellent diuretick.

Of this genus there are five others, whose descriptions would be tedious repetition. They differ by the following characters:

1. Bearded Dogs Grass, *Gramen caninum aristatum radice non repente.* The root fibrous.
2. Sea Dogs Grass, with a wheat-ear, *Gramen caninum maritimum spica tritica.* The spike very large.
3. Prickly Sea Dogs Grass, *Gramen maritimum spica lobacea foliis pungentibus.* The ear slender.
4. Procumbent Sea Dogs Grass, with a thick spike. *Gramen lobaceum maritimum supinum spica crassa.*
5. Long-rooted Sea Dogs Grass, with a foliaceous ear, *Gramen caninum maritimum spica foliacea.* The grains grow in the ear, and shoot out leaves.

GENUS VI.

RYE GRASS.

GRAMEN SECALINUM.

THE cup contains three flowers; and is composed of four leaves, with double points, sharp, and prickly. The flower is composed of two valves: the lower one is bellied, and terminates in a long awn; the other is small, plain, and lanceolated.

Linnæus places this among the *triandria digynia.*

Rye Grass, called Wall Barley.

Gramen secalinum vulgare.

The root is fibrous.

The stalk is thick, jointed, not very upright, and ten inches high.

The leaves are long, narrow, and of a faint green.

The spike is short, thick, and rough.

We have it by way-sides every where.

C. Bauhine calls it *Gramen hordeaceum minus et vulgare.* Others, *Hordeum spinum.*

There are four other *rye grasses*, agreeing in their general form, but distinguished by the following particulars.

1. Tall Meadow Rye Grass, *Gramen secalinum pratense elatius.* Tall, and slender in the stalk and ear.
2. Marsh Rye Grass, *Gramen secalinum palustre et maritimum.* The leaves bluish, and the ear short.
3. Great Wood Rye Grass, *Gramen secalinum majus sylvaticum.* Slenderer in the ear than any other.
4. Long-leaved Rye Grass, with a short ear. *Gramen secalinum altissimum spica brevi aristis longis extantibus.*
5. Tall, broad-eared Rye Grass, *Gramen spica brizæ majus.* Tall, and very rough in the ear.

GENUS VII.

MATWEED.

GRAMEN SPARTEUM.

THE cup contains but one flower; and it is compoſed of two valves; one larger than the other, and both pointed, but without awns. The flower is compoſed of two nearly equal valves, of an oblong form, and downy at the ends. The ear is broad, and ſpreading.

Linnæus places this among the *triandria digynia*.

Sea-Matweed.

Gramen ſparteum ſpica ſeralina.

The root is a tuft of white fibres.

The leaves are narrow, long, of a bluiſh green, and ſharp-pointed.

The ſtalk is round, jointed, and of a pale green.

The ear is large, and whitiſh.

It is common by our ſea-ſhores, and flowers in June.

C. Bauhine calls it *Gramen ſparteum ſpicatum foliis mucronatis longioribus.*

There are three other of the *matweed* graſſes natives of our kingdom, diſtinguiſhed by the following characters.

1. Small Matweed, *Gramen ſparteum jun. ſolium.* The leaves ruſhy, and the ſpike thin and bending.
2. Feathered Matweed, *Gramen ſparteum pennatum.* The ear downy, and reſembling a feather.
3. Double ſpiked Matweed, *Sparteum Eſſexianum ſpica genima clauſa.* The ear double.

GENUS VIII.

PANIC GRASS.

GRAMEN PANICEUM.

THE cup contains one flower; and is formed of numerous, very narrow, pointed leaves, variouſly inſerted: within this ſtands a huſk, formed of three valves, one ſmaller than the other. The flower is placed within this; and is compoſed of two valves, one larger than the other.

Linnæus places this among the *triandria*.

1. Panic Graſs, with a divided Spike.

Gramen panicum ſpica diviſa.

The root is a tuft of white fibres.

The ſtalk is jointed, yellowiſh, and ſlender.

The leaves are long, and of a pale green.

The ear is divided into ſeveral ſpreading parts.

The flowers are whitiſh.

It is common in the meadows in Buckinghamſhire, flowering in April.

C. Bauhine calls it *Gramen paniceum ſpica diviſa.*

There are three other *panic graſſes* wild with us, diſtinguiſhed by theſe characters:

1. Panic Graſs, with a ſingle, ſmooth ear, *Gramen paniceum ſpica ſimplici lævi.* The ear yellowiſh.
2. Rough-eared Panic Graſs, *Gramen paniceum ſpica aſpera.* The ſpikes are looſe, and very rough.
3. Pyramidal-ſpiked Panic Graſs, *Gramen paniceum ſcrotinum arvenſe ſpica pyramidata.* In corn-fields.
4. Variegated, ſpiked Panic Graſs, *Gramen paniceum ſemine albo phalaris dictum.* Common Canary graſs.

GENUS IX.

SPIKED OATGRASS.

GRAMEN AVENACEUM SPICATUM.

THE cup contains only one flower: it is formed of two valves, and is of a pointed ſhape. The flower is compoſed of two valves; one terminated by an awn, and larger than the other.

Linnæus places this among the *trigynia*.

We have only one ſpecies of it, reſembling the *common oat* in growth.

1. Spiked Hedge-Oatgraſs, *Gramen avenaceum dumetorum ſpicatum.* The ſpike formed of looſe parts.

GENUS X.

DARNELL.

GRAMEN LOLIACEUM.

THE cup contains ſeveral flowers, arranged in two ſeries cloſe to the ſtalk: it is formed of a ſingle, oblong, pointed, rigid valve. The flower is compoſed of two valves: the lower is narrow and round, the other ſhort and obtuſe.

Linnæus places this with the reſt among the *triandria digynia.*

Red Darnell, or Raygraſs.

Gramen loliaceum anguſtiore folio.

The root is a thick tuft of fibres.

The leaves are of a deep green, narrow, and ſharp pointed.

The ſtalk is a foot high, tough, and of a duſky green.

The ſpike is flat, ſmall, and brown.

It is common by way ſides, and is ſown in paſtures for cattle.

C. Bauhine calls it *Gramen loliaceum anguſtiore folio et ſpica.*

We have four other ſpecies of it, diſtinguiſhed by the following characters:

1. White Darnell Graſs, *Gramen loliaceum ſpica longiore, ſive Lolium album.* The ear long and whitiſh.
2. Small Sea Darnell Graſs, *Gramin parvum marinum ſpica loliacea.* The ſpike ſlender and hard.
3. Dwarf hard Darnell Graſs, *Gramen pumilum loliacco ſimile maritimum.* The leaves browniſh.

GENUS XI.

FOXTAIL GRASS.

GRAMEN ALOPECUROIDES.

THE cup contains but one flower: it is formed of two valves; which are oblong, very narrow, and terminate in feathery hairs. The flower is compoſed of two valves: the outer one is the longer, and has two ſmall and ſtrait awns from its end, and a third from the middle of its back. The two firſt are ſtrait, this crooked: the inner valve is ſmall, and pointed.

Common Foxtail Graſs.

Gramen alopecuroides vulgaris.

The root is fibrous.

The ſtalk is a yard high.

The leaves are narrow, long, and of a greyiſh green; and they appear duſty. The ſpike is thick, and of a pale greyiſh colour.

It is common in meadows, and flowers in May.

C. Bauhine calls it *Gramen phalaroides majus, ſive Italicum.* Others, *Alopecurus.*

Beſide this, we have four other ſpecies, which will be ſufficiently diſtinguiſhed by the following characters:

1. Spiked Float Graſs, *Gramen aquaticum geniculatum ſpicatum.* The ſpike ſmaller and ſlenderer.
2. Dwarf Foxtail Graſs, with a ſilvery purpliſh ſpike, *Gramen pumilum hirſutum ſpica purpuro argentea mollo.*
3. Great Engliſh Marſh Foxtail Graſs, *Alopecuros maxima Anglica.* Very large, in wet places near the ſea.
4. Rough-eared Foxtail Graſs, *Gramen alopecuroides ſpica aſpera brevi.* The ſpike very rough.

GENUS XII.

MOUSETAIL GRASS.

GRAMEN MYOSUROIDES.

THE cup contains but one flower; and is formed of two valves, of an oval form, hollow, compreſſed, and pointed. The flower conſiſts of a ſingle, hollow valve, which has a long awn riſing from its back near the baſe.

Linnæus ranges this with the reſt among the *triandria digynia.*

Great Mouſetail Graſs.

Gramen myoſuroides majus.

The root is fibrous.

The leaves are of a faint green.

The ſtalk is two feet high, ſlender, firm, and of a pale green.

The ſpike is rough, hard, ſlender, and uſually tinged with red, but ſometimes entirely white.

It is common in paſtures, flowering in June.

C. Bauhine

C. Bauhine calls it *Gramen typhoides ſpica anguſtiore.*

We have two others:

1. Leſſer Mouſetail Graſs, with crooked awns, *Gramen myoſuroides minus ſpica breviore ariſtis recurvis.*
2. Knobby-rooted Mouſetail Graſs, *Gramen myoſuroides nodoſum.* The ſpike brownish and ſhort.

GENUS XIII.

CATSTAIL GRASS.

GRAMEN TYPHINUM.

THE ſpike is rough. The cup contains one flower: it is formed of two valves, and is oblong and compreſſed. The valves are equal; and they terminate in ſhort awns. The flower is formed of two valves, and is ſhorter than the cup: the outer valve is the larger, and it cloſes about the inner, which is ſmaller.

Linnæus places this with the *triandria.*

The Greateſt Catſtail Graſs.

Gramen typhinum maximum.

The root is fibrous.

The ſtalk is jointed, hollow, and a foot and half high.

The leaves are of a greyiſh green.

The ſpike is long, ſlender, greyiſh, and very rough to the touch.

It is common in paſtures, and flowers in June.

C. Bauhine calls it *Gramen typhoides aſperum primum.* Others, *Gramen typhinum.*

We have three others;

1. Leſſer Catſtail Graſs, *Gramen typhinum minus.* A low plant, with a very ſlender, rough ſpike.
2. Knobby-rooted Catſtail Graſs, *Gramen nodoſum ſpica parva.* The ſpike ſhort, grey, and very rough.
3. Sea Catſtail Graſs, *Gramen typhinum maritimum minus.* The ſpike ſmaller at the top than upwards.

GENUS XI.

CRESTED GRASS.

GRAMEN CRISTATUM.

THE ſpike is compoſed of two or more ſeries of flowers, which turn one way. There is a partial cup, formed of one pointed leaf, and ſtanding ſideways. The proper cup contains ſeveral flowers; and is ſtrait, narrow, and formed of two equal valves. The flower is compoſed of two valves: the outer one hollow, with an awn; the inner plain and naked.

Smooth Creſted Graſs.

Gramen criſtatum vulgare.

The root is fibrous.

The leaves are of a fine green.

The ſtalk is a foot and half high, ſlender, and of a pale green.

The ſpike is creſted, long, ſlender, and yelloviſh.

It flowers in May in meadows.

We have three others:

1. Square Creſted Graſs, *Gramen criſtatum quadratum.* This has four rows of flowers.
2. Small Mountain ſpiked Graſs, with a thick, ſhort, blue ſpike, *Gramen parvum montanum ſpica craſſiore purpuro cærulea brevi.*
3. Vernal Graſs, with a looſe, yelloviſh ſpike, *Gramen vernum ſpica brevi laxa.* Common in paſtures.

GENUS XV.

COCKSFOOT GRASS.

GRAMEN DACTYLUM.

THE ſpikes are numerous, and ſpread in the manner of fingers. There is a common ſcabbard, containing many flowers; and this is formed of ſeveral very narrow leaves, of unequal inſertion. The cup contains only one flower; and is compoſed of three oval and pointed valves, one ſmaller than the others.

Cocksfoot

Cocksfoot Grass.

Gramen dactylum vulgare.

The root is fibrous.

The leaves are narrow, not very long, and of a faint green.

The stalk is ten inches high, jointed, of a pale green, and thick set with leaves.

The spikes are numerous, very slender, and brown.

It is common in our southern counties, and flowers in July.

C. Bauhine calls it *Gramen dactylon latiore folio.*

We have one other species:

1. Creeping Cocksfoot Grass, *Gramen repens cum panicula graminis manna.* Frequent on our western sea-coasts.

GENUS XVI.

REED GRASS.

GRAMEN ARUNDINACEUM.

THE flowers are disposed in tufts or bunches. There is a covering, formed of several leaves; which contains only a single flower, and its cup. The cup is composed of three valves; one smaller than the others, and placed behind them; the others of an oval, pointed figure. The flower is composed of two valves, one larger and hollowed, the other smaller and plain.

Great, chaffy Reed Grass.

Gramen arundinaceum aceroſa gluma.

The root is fibrous.

The stalk is round, five feet high, and jointed.

The leaves are large, and of a bluish green.

The tuft of flowers is compact and greyish, with a tinge of red.

It is common by waters, flowering in July.

We have five other species, whose manner of growth is the same; and their difference will be sufficiently expressed in their names.

1. Broad-leaved chaffy Reed Grass, *Gramen arundinaceum aceroſa gluma Perſicanum.* The same with the striped grass in gardens, only plain.
2. Rough Grass, *Gramen aſperum.* Common in meadows, with bluish, green, very rough leaves.
3. Common Reed, *Arundo vulgaris.* Too well known for description.
4. Reed Grass, with pappose panicles, *Gramen arundinaceum paniculâ molli ſpadicena majus.* The panicle soft and reddish.
5. Small Reed Grass, *Calamogroſtis minor glumis fuſcis et viridibus.* The panicle variegated.

GENUS XVII.

MILLET GRASS.

GRAMEN MILIACEUM.

THE panicle is scattered, loose, and smooth. The flowers stand singly in a twofold cup. The outer cup is formed of many very narrow leaves: the inner one is composed of three, of different bigness, but the same oval shape. The flower itself consists of two valves, one larger and hollowed, the other smaller and plain.

Millet Grass.

Gramen miliaceum vulgare.

The root is fibrous, and reddish.

The leaves are broad, and of a fine green.

The stalk is a yard high.

The flowers stand in a vast scattered tuft; and are glossy and yellowish.

It is common in thickets, and flowers in June.

C. Bauhine calls it *Gramen ſylvaticum panicula miliacea ſparſa.*

We have sixteen others.

1. Small Creeping Millet Grass, *Gramen montanum miliaceum minus radice repente.* The tuft small.
2. Water Millet Grass, *Gramen miliaceum aquaticum.* The panicle is smooth and brown.
3. Small-headed Millet Grass, *Gramen miliaceum locuſtis minimis panicula arundinacea.*
4. Fair, panicled Corn Grass, or Bent Grass, *Gramen miliaceum ſegetale majus.* The flowers purplish.
5. Loose, panicled, purplish flowered Millet Grass, *Gramen miliaceum nemorenſe paniculâ fuſcis.*
6. Red-headed Mountain Millet Grass, *Gramen miliaceum locuſtis rubris montanum.*
7. Long, purple-headed Millet Grass, *Gramen miliaceum ſerotinum panicula longa purpurascente.*
8. Narrow leaved Millet Grass, *Gramen miliaceum anguſtiſſimo ſolio.* The leaves deep green.
9. Narrow, fine headed Millet Grass, *Gramen miliaceum anguſtifolium glumis perexiguis.*
10. Great, brown Meadow Millet Grass, *Gramen miliaceum majus panicula ſpadicea.*
11. Green-headed Millet Grass, *Gramen miliaceum majus panicula viridi.* The leaves broad.

12. Long,

12. Long, flowered Wood Millet Graſs, *Gramen miliaceum ſylveſtre glumis oblongis.*
13. Soft, tufted Meadow Millet Graſs, *Gramen miliaceum pratenſe molle.* The head greeniſh.
14. Soft Millet Graſs, with awns, *Gramen miliaceum ariſtatum molle.* The head brown.
15. Soft, Sea Millet Graſs, *Gramen maritimum miliaceum molle.* The head greyiſh.
16. Brown, awned Millet Graſs, *Gramen miliaceum majus glumis ariſtatis ſpadiceis et pallidis.*

GENUS XVIII.

OATGRASS.

GRAMEN AVENACEUM,

THE cup is formed of two valves, of an oblong figure, pointed at the end, and hollowed: the flower is compoſed alſo of two valves; the one larger, and hollowed; the other ſmaller, and plain. The ſeed is oblong.

1. Thoſe with larger heads.

1. Single, ſpiked Mountain Oatgraſs.

Gramen avenaceum montanum ſpica ſimplici ariſtis recurvis.

The root is formed of a few ſpreading parts, hung with innumerable fibres.

The leaves are narrow, and of a greyiſh green, perfectly ſmooth, and firm to the touch.

The ſtalk is ſlender, jointed, and a foot high.

The flowers are ranged in a ſlender panicle, forming a kind of ſpike; and they are of a pale green.

It is frequent in hilly paſtures, and flowers in June.

C. Bauhine calls it *Gramen avenaceum glabrum.*

Beſide this, we have a long ſeries of other *oatgraſſes.*

2. Purpliſh headed Oatgraſs, *Gramen avenaceum panicula purpuro argentea ſplendente.* In dry paſtures.
3. Tall, ſhining headed Oatgraſs, *Gramen avenaceum panicula aceroſa ſemine pappoſo.* The panicle ſlender.
4. Knobby-rooted Oatgraſs, *Gramen avenaceum nodoſum.* The panicle bends down on one ſide.
5. Small-eared, yellow-headed Oatgraſs, *Gramen avenaceum pratenſe elatius panicula flaveſcente.*
6. Small headed, fine Oatgraſs, *Gramen avenaceum ſparſa panicula ſpecioſa locuſtis minimis.* In woods.
7. Small, annual, fair, panicled Graſs, *Gramen paniculatum locuſtis parvis purpuro argenteis annuum.*
8. Small, perennial, fair, panicled Graſs, *Gramen paniculatum locuſtis purpuro argenteis majus et perenne.*
9. Fine-leaved, white-headed Oatgraſs, *Gramen avenaceum paniculis albis capillaceo folio.* In woods.
10. Small, hoary-top'd Graſs, *Gramen parvum glaucum panicula laxa caneſcente.* In dry paſtures.
11. Dwarf procumbent Oatgraſs, *Gramen avenaceum parvum procumbens panicula non ariſtata.*

2. With ſmall heads, without awns.

12. Common Meadow Graſs, *Gramen pratenſe majus vulgatiſſimum.* This is a true *oatgraſs*, without awns.
13. Greater Meadow-Graſs, *Gramen pratenſe paniculatum medium.* Larger, and with paler leaves.
14. The greateſt Meadow-Graſs, *Gramen pratenſe paniculatum latiore folio.* The leaves very broad.
15. Great, narrow-leaved Meadow Graſs, *Gramen pratenſe majus paniculatum anguſtiore folio.*
16. Flat-ſtalked Meadow-Graſs, *Gramen pratenſe paniculatum medium caule compreſſo.*
17. Sea-Oatgraſs, *Gramen paniculatum maritimum vulgatiſſimum.* The panicle greyiſh.
18. Matted Sea-Oatgraſs, *Gramen caninum maritimum paniculatum.* In thick tufts.
19. Small, hard Graſs, *Gramen exile duriuſculum in muris et aridis proveniens.* On old walls.
20. Feather-headed Oatgraſs, *Gramen capillaceum locuſtellis pennatis non ariſtatis.* On dry banks.
21. Ruſhy-leaved Oatgraſs, *Gramen foliolis junceis oblongis radice alba.* The panicle ſmall and greeniſh.
22. Graſs upon Graſs, *Gramen ſparteum montanum ſpica foliacea graminea.* In mountainous places.
23. Long, rough panicled Oatgraſs, *Gramen arvenſe panicula criſta longiore.* In corn-fields.
24. Great Water Reed Graſs, *Gramen aquaticum majus.* Common by waters, with broad, pale leaves.
25. Oat-headed Reed Graſs, *Gramen aquaticum arundinaceum panicula avenacea.* Very tall.
26. Smooth, broad-leaved Wood Oatgraſs, *Gramen paniculatum nemoroſum latiore folio panicula nutante.*
27. Long-headed Oatgraſs, *Gramen paniculatum elatius ſpicis longis muticis ſquammoſis.*
28. Float-Graſs, *Gramen aquaticum longiſſima panicula.* The panicle very long, and loofe.

3. With ſmaller heads, with awns.

29. Great Wild Oatgraſs, or Drank, *Feſtuca avenacea ſterilis elatior.* By hedges in May.
30. Upright-headed great Oatgraſs, *Feſtuca avenacea ſterilis ſpicis erectis.* By ditches, and on banks.
31. Wild Oatgraſs, with compact panicles, *Feſtuca avenacea ſterilis paniculis confertis erectioribus.*
32. Drooping, hard, panicled Oatgraſs, *Gramen pratenſ*

pretense panicula durore laxa, unam partem ſpectans.

33. Rough Oatgraſs, with a compact panicle, *Avena aſpera hirſuta paniculis minus ſparſis.*

34. Fine ſmooth-headed Oatgraſs, *Gramen avenaceum panicula tenuiore glabra.*

35. Lean, panicled, ſmooth headed Oatgraſs, *Avena macra panicula ſpicis ſtrigoſioribus glumis glabris compoſitis.*

36. Oat-like, with large, ſmooth ſpikes, and branched panicles, *Feſtuca avenacea ſpicis barbatis paniculis glabris.*

37. Purple awned Oatgraſs, *Feſtuca elatior paniculis minus ſparſis locuſtis oblongis ariſtis purpureis.*

38. Buſh-Oatgraſs, with a ſparſed panicle, *Gramen avenaceum dumetorum panicula ſparſa.*

29. Fine awned Oatgraſs, *Gramen avenaceum glabrum panicula e ſpicis raris ſtrigoſis compoſita ariſtis tenuiſſimis.*

40. Capon's tail Graſs, *Gramen murorum ſpica longiſſima nutante.* A very beautiful graſs on walls.

41. Small, panicled Oatgraſs, *Gramen paniculatum bromoides minus paniculis ariſtatis unam partim ſpectantibus.*

GENUS XIX.

QUAKING GRASS.

GRAMEN TREMULUM.

THE cup is compoſed of two valves, and contains ſeveral flowers, ranged in a double ſeries, and in a heart-like form: the two valves compoſing this are hollow, of a heart-like ſhape, and equal in ſize. The flower is formed of two valves: the lower is of the ſhape and bigneſs of the cup, the upper is very ſmall, flat, and roundiſh; and is placed ſo as to ſhut up the hollow of the other. The ſeed is roundiſh.

Linnæus places this among the *triandria.*

1. Quaking Graſs.

Gramen tremulum majus.

The root is fibrous.

The leaves are narrow, and of a faint green.

The ſtalk is ſlender and pale; and at the top ſupports numerous, large heads, on very ſlender footſtalks: theſe are of a pale brown, tinged with red, and tremble on their footſtalks; thence the name.

It is common in paſtures, and flowers in May.

C. Bauhine calls it *Gramen tremulum majus.*

We have one other ſpecies:

2. Small Quaking Graſs, *Gramen tremulum minus panicula ampla locuſtis parvis triangulis.*

GENUS XX.

WOOD GRASS.

GRAMEN NEMOROSUM.

THE outer cup is compoſed of two valves: the inner or proper cup is formed of ſix oblong, pointed leaves; which are coloured, and by ſome have been called petals. The ſeed-veſſel is divided into three parts, and contains ſeveral roundiſh ſeeds.

Linnæus places this among the *hexandria*, the threads being ſix.

1. Hairy Wood Graſs.

Gramen nemoroſum hirſutum vulgare.

The root is compoſed of numerous, thick fibres.

The leaves are long, narrow, of a fine green, and covered lightly with long, brown hairs.

The ſtalk is a foot and half high; and at its top ſtand many conſpicuous flowers, of a browniſh colour, tinged with a little white, and placed ſingly on long, ſlender footſtalks, riſing from one common point at the head of the principal ſtalk.

It is common in woods, flowering in May.

C. Bauhine calls it *Gramen nemoroſum hirſutum majus latifolium.* But there is a larger kind.

2. Great hairy Wood Graſs, with a ruſhy panicle, *Gramen hirſutum elatius panicula juncea compacta.*

3. Greateſt, broad-leaved, hairy Wood Graſs, *Gramen nemoroſum hirſutum latifolium maximum.*

4. Small, hairy Wood Graſs, *Gramen exile hirſutum.* Common in woods, paſtures, and heaths, in April.

GENUS XXI.

CYPRUS GRASS.

GRAMEN CYPEROIDES.

THE leaves are long and narrow, and the ſtalks triangular.

This obvious diſtinction ſeparates them from all other plants, better than the ſtructure of their flowers, which is uncertain in the ſeveral kinds; this mark is invariable.

Linnæus places them among the *triandria*.

1. *Thoſe with many full ſpikes, and a chaffy one at the top.*

1. Narrow-leaved Cyperus Graſs.
Gramen cyperoides majus anguſtiſolium.

The root creeps under the ſurface, and has many fibres.

The leaves are long, narrow, and of a fine green.

The ſtalk is two feet high, of a paler green, and exactly three ſquare.

The ſpikes are few, and ſtand toward the top; and the uppermoſt, which is light and chaffy, is thicker than the others: this is yellowiſh, the others are black.

It is common by waters, and flowers in May.

C. Bauhine calls it *Gramen cyperoides majus angyſtifolium.*

We have a vaſt number of other ſpecies.

2. Great Vernal Cyperus Graſs, *Gramen cyperoides cum paniculis nigris.* The leaves broad, and dark.
3. Pink-leaved Cyperus Graſs, with large ſeeds, *Gramen cyperoides foliis caryophylleis granis tumidis rarioribus.*
4. Pink-leaved Cyperus Graſs, with erect ſeſſile ſpikes, *Gramen cyperoides foliis caryophylleis ſpicis ſeſſilibus erectis.*
5. Pink-leaved Cyperus Graſs, with pendulous heads, *Gramen cyperoides foliis caryophylleis ſpicis pendulis.*
6. Narrower-leaved Cyperus Graſs, *Gramen cyperoides caryophylleum anguſtiſſimis foliis ſpicis erectis.*
7. Hairy Cyperus Graſs, *Gramen cyperoides polyſtachion lanuginoſum.* In boggy places.
8. Yellowiſh Cyperus Graſs with ſhort ſpikes, *Gramen cyperoides polyſtachion flavicans ſpicis brevibus.*
9. Great, round ſpiked Cyperus Graſs, *Gramen cyperoides majus ſpicis teretibus erectis.*
10. Slender-eared Wood Cyperus Graſs, *Gramen cyperoides ſylvarum tenuius ſpicatum.*
11. Slender-eared, broad-leaved Cyperus Graſs, *Gramen cyperoides latifolium ſpicis multis ſtrigoſis.*
12. Cyperus Graſs, with a ſhort pendulous ſpike, *Gramen cyperoides ſpica pendula breviore.* By waters.
13. Many ſpiked Cyperus Graſs, with long pendulous heads, *Gramen cyperoides ſpica pendula longiore.*
14. Thick, yellow-ſpiked Cyperus Graſs, *Gramen cyperoides præcox ſpicis turgidis teretibus flaveſcentibus.*
15. Cyperus Graſs, with a few roundiſh ſpikes, *Gramen cyperoides ſpicis tribus ſubrotundis vix aculeatis.*
16. Cyperus Graſs, with ſhort, diſtant ſpikes, *Gramen cyperoides ſpicis brevibus diſtantibus.*
17. The leaſt Vernal Cyperus Graſs, *Gramen cyperoides vernum minimum.* The heads browniſh.
18. Marſh-Hedgehog Graſs, *Gramen paluſtre echinatum.* A ſmall plant, with ſhort, prickly ſpikes.
19. Soft-leaved Cyperus Graſs, *Gramen cyperoides ſpicis brevibus congeſtis folio molli.*
20. Slender-leaved Cyperus Graſs, *Gramen cyperoides tenuifolium.* A ſmall kind, with a few thick ſpikes.

2. *Thoſe with ſeveral ſpikes at the top of the ſtalk, but no chaffy one.*

21. Marſh Cyperus Graſs, with looſe ſpikes, *Gramen cyperoides paluſtre elatius ſpica longiore laxa.*
22. Cyperus Graſs, with a head compoſed of ſoft ſpikes, *Gramen cyperoides ſpica e ſpicis pluribus mollibus compoſita.*
23. Marſh Cyperus Graſs, with a divided head, *Gramen cyperoides ex monte Ballace ſpica divulſa.*
24. Cyperus Graſs, with a ſoft, compound head, *Gramen cyperoides ſpica e pluribus ſpicibus longioribus compoſita.*
25. Sea Cyperus Graſs, with a compound ſpike, *Gramen maritimum cyperoides ſpica compoſita.*
26. Elegant Cyperus Graſs, with a rough compounded head, *Gramen cyperoides ſpica compoſita aſperiore.*
27. Elegant Cyperus Graſs, with a ſoft head, *Gramen cyperoides elegans ſpica compoſita molle.*
28. Greater-ſpiked Cyperus Graſs, *Gramen cyperoides paluſtre majus ſpica compoſita.*
29. The leſſer ſpiked Cyperus Graſs, *Gramen cyperoides ſpicatum minus.* The ſtalk droops.
30. The leſſer ſpiked Cyperus Graſs, with an interrupted ſpike, *Gramen cyperoides ſpica divulſa minus.*
31. Narrow-leaved, ſhort ſpiked Cyperus Graſs, *Gramen cyperoides anguſtifolium ſpicis brevibus in foliorum alis.*
32. The leaſt prickly-headed, ſpiked Cyperus Graſs, *Gramen cyperoides ſpicatum minimum ſpica divulſa aculeata.*
33. Flea-Graſs, *Gramen cyperoides minimum ſeminibus deorſum reflexis pulciformibus.*
34. Flat-ſpiked Cyperus Graſs, *Gramen cyperoides ſpica ſimplici compreſſa diſticha.*
35. Small Cyperus Graſs, with a crowfoot-head, *Gramen cyperoides minimum ranunculi capitulo rotundo.*
36. Long crowfoot-headed Cyperus Graſs, *Gramen cyperoides minus ranunculi capitulo longiore.*

GENUS

GENUS XXII.

CYPERUS.

THE cup contains many flowers, and is formed of two valves. The flower is compoſed of ſix valves, which are oblong and convergent: they are placed in an imbricated manner, and the outer ones are ſmalleſt.

1. Long Cyperus.
Cyperus longus odoratus.

The root is irregular, and oblong.

The leaves are long, broad, ſharp, and of a fine green.

The ſtalk is firm, upright, and of a paler green; and at its top there ſtand numerous tufted ſpikes, compoſed of little ears, on ſeparate ſpreading footſtalks: theſe are of a fine gloſſy brown.

We have it by pond-ſides. It flowers in June.

C. Bauhine calls it *Cyperus odoratus radice longa.*

The root is diuretick and deobſtruent.

We have, beſide this, five ſpecies of true *cyperus*, though ſome of them called only *cyperus graſſes.*

2. Marſh Cyperus, with a ſcattered panicle, *Cyperus paluſtris panicula ſparſa.* The ſpikes very ſhort.
3. Round-rooted Baſtard Cyperus, *Cyperus rotundus litoreus inodorus.* The leaves very broad and pale.
4. Long-rooted Baſtard Cyperus, *Cyperus longus inodorus ſylveſtris.* The ſtalk of this is round.
5. Millet Cyperus, *Cyperus gramineus milliaceus.* The ſtalk three ſquare, and the leaves narrow.
6. Small, round Cyperus, *Cyperus paluſtris birſutus paniculis albis paleaceis.*

GENUS XXIII.

BULLRUSH.

SCIRPUS.

THE flowers are cluſtered together, in ſingle or divided heads; and are ſeparated one from another by ſmall, oval, plain, but ſomewhat bent leaves. There is no part of a flower, except the filaments, which riſe at the baſes of theſe ſcales. The ſeeds are ſingle, large, and three-cornered.

Linnæus places this among the *triandria*; the filaments, which in a manner conſtitute the flower, being three.

1. The Bullruſh.
Scirpus paluſtris altiſſimus.

The root is compoſed of innumerable thick fibres.

The ſtalk is green, thick, a yard high, and ſpungy.

It is uſually ſurrounded at the baſe by a brownish membrane, and tip'd with brown at the top; a little below the ſummit burſt forth the flowers; they are ſmall, brown, and forming a looſe panicle.

It is common in waters, flowering in June.

C. Bauhine calls it *Juncus maximus.*

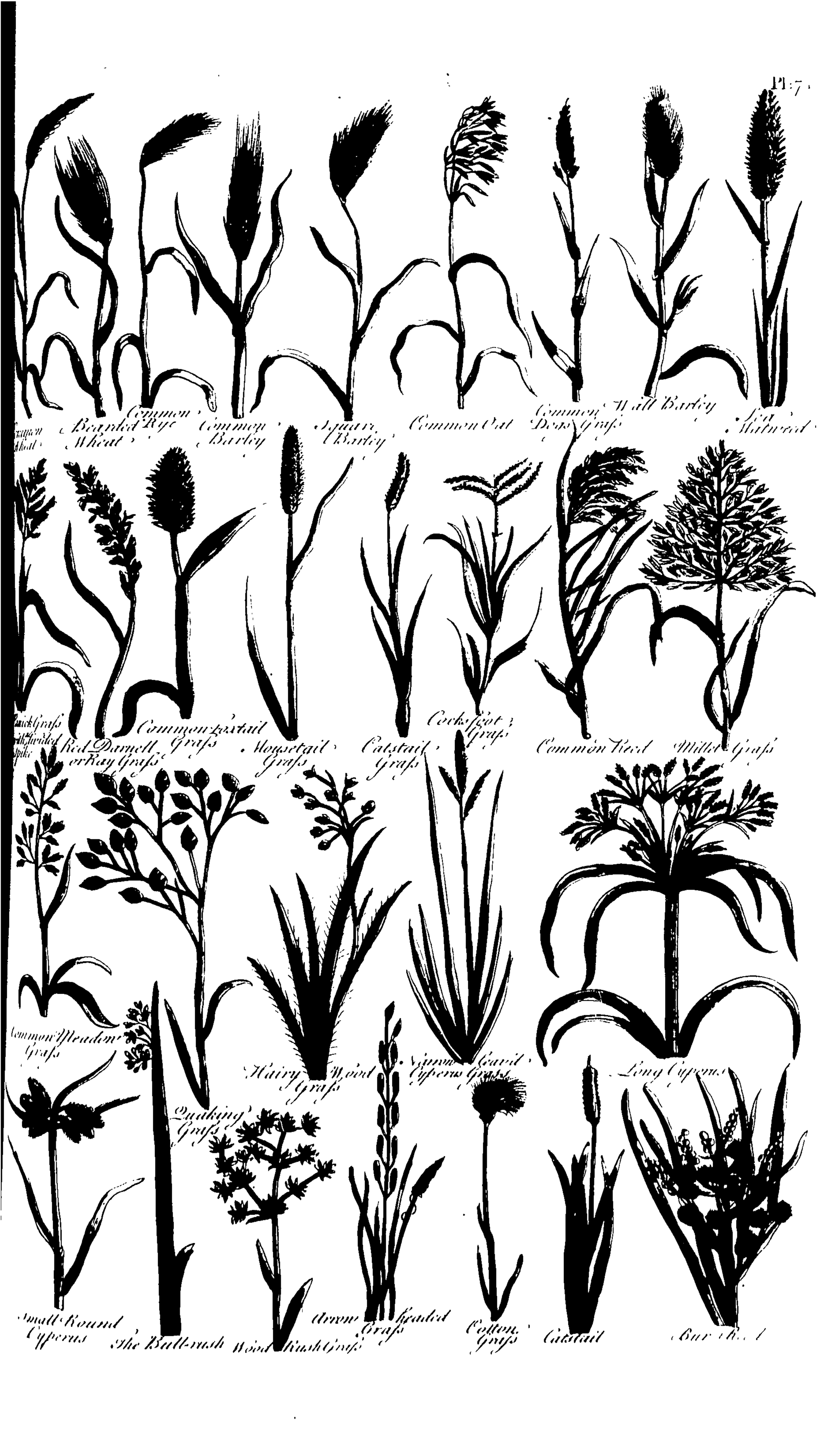
We have twelve other kinds.

1. *Naked ſcirpi.*

1. The Leſſer Bullruſh, *Juncus ſive ſcirpus medius.* Two feet high, ſmooth, and with a ſlender ſtalk.
2. Fluted Ruſh, *Juncus aquaticus medius caule carinato.* The colour a pale bluiſh green.
3. Three-ſquare Ruſh, *Juncus acutus maritimus caule triquetro maximo molli procerior.* A very tall plant.
4. Leſſer prickly Sea-Ruſh, *Juncus acutus maritimus caule triquetro nucerone pungente.*
5. Round cluſter-headed Sea-Ruſh, *Scirpus maritimus capitulis rotundioribus conglomeratis.*
6. Club Ruſh, or aglet-headed Ruſh, *Scirpus equiſeli capitulo majori.* Common in brooks.
7. The leaſt upright Club Ruſh, *Scirpus minimus capitulis equiſeli.* The ſtalk not thicker than a large briſtle.

2. *Scirpi with leaves.*

8. Dwarf Ruſh, with ſmall aglet heads, *Scirpus montanus capitulo breviori.* In hilly paſtures.
9. Round, black-headed Marſh Ruſh, *Juncus lævis minor capitulo glomerato nigricante.*
10. The leaſt Ruſh, *Scirpus foliaceus humilis.* Common in damp places, where the ſoil is poor.
11. Marſh Ruſh Graſs, with ſleawort heads, *Scirpus equiſeli capitulo minore.* In watery places.
12. Many-headed leafy Ruſh, *Gramen junceum polyſtachion.* The panicle very looſe and ſcattered.



Common Bearded Wheat
Common Barley
Square Barley
Common Oat
Bear Grass
Common Hill Barley
Sea Barley
Quaking Grass
Red Darnel or Ray Grass
Common Cocksfoot Grass
Hogsetail Grass
Catstail Grass
Corkscrew Grass
Common Reed
Millet Grass
Common Meadow Grass
Hairy Wood Grass
Quaking Grass
Common Cyperus Grass
Long Cyperus
Small Round Cyperus
The Bullrush
Wood Rush Grass
Downy Branched Grass
Cotton Grass
Cattail
Bur Reed

GENUS XXIV.

RUSH.

JUNCUS.

THE flower is compoſed of a ſix-leaved cup, with the filaments and rudiment of a ſeed-veſſel. The leaves of the cup are oblong, ſharp-pointed, and permanent. The ſeed-veſſel is large, and divided into three parts.

1. *Scirpi without leaves.*

1. Pricking, large Sea-Ruſh.
Juncus acutus capitulis ſorghi.

The root is compoſed of innumerable fibres, interwoven in a ſtrange manner with one another.

The ſtalk is two feet high, firm, hard, of a pale green, and prickly at the top.

The flowering heads are brown; and they ſtand cluſtered together.

It is common by the ſea-ſide, flowering in June.

We have twelve other ſpecies, including what are called *ruſh-graſſes*.

The reader will ſee, by the different ſtructure of the flowers, how very improperly the *junci* and *ſcirpi* are called in Engliſh by the common name *ruſh*. We have in this enumeration retained the names by which they are deſcribed in the works of our own writers, as it is under them they are familiarly known: but the judicious reader will ſee from their place to which head they properly belong.

Were the purpoſe here ſole curioſity, a volume might be employed on the graſſes alone; but we hope to convey a juſt idea of the ſpecies of theſe, and the other leſs uſeful plants, by theſe enumerations, without ſwelling the volume beyond the intended ſize.

2. Engliſh Sea Hard Ruſh, *Juncus acutus maritimus Anglicus*. The ſtalk ſolid, and two feet high.
3. Common Hard Ruſh, *Juncus acutis vulgaris*. The ſtalk hard, ſtriated, and prickly at the top.
4. Common ſoft Ruſh, *Juncus lævis vulgaris*. The ſtalk ſoft and ſpungy.
5. Soft Ruſh, with a compact panicle, *Juncus lævis panicula compacta*. The ſtalk is ſtriated.
6. Long-top'd Ruſh, *Juncus parvus calamo ſupra paniculum longius producto*.

2. *Ruſhes, with leaves.*

7. Moſs Ruſh, or Gooſe-corn, *Juncus montanus paluſtris*. The leaves ſpread on the ground as rays.
8. Small Ruſh graſs, with jointed leaves, *Juncus foliis articuloſis floribus umbellatis*.
9. Wood Ruſh graſs, or great Ruſh graſs, with jointed leaves, *Juncus nemoroſus folio articulato*. The heads brown.
10. Ruſh graſs, with round ſeed-veſſels, *Juncus parvus pericarpiis rotundis*.
11. The leaſt triangular-ſeeded Ruſh graſs, *Juncus capſulis triangulis minimus*.
12. Toad-Graſs, *Juncus paluſtris humilior erectus*. The ſtalk is branched, and four inches high.
13. Dwarf Toad-graſs, *Gramen juncoides minimum Anglo-Britanicum*. The heads oval.

GENUS XXV.

ARROW GRASS.

TRIGLOCHIN.

THE cup is formed of three hollow, oval, obtuſe leaves. The flower is formed of three petals, of a pale colour, and reſembling them in ſhape. The ſeed-veſſel is oval, and large. Linnæus places this among the *hexandria*.

1. Common Arrow Graſs.
Triglochin vulgare.

The root is compoſed of numerous fibres.

The leaves are narrow, numerous, and of a fine green.

The ſtalk is a foot high, and the flowers terminate it in a long and ſlender ſpike.

It is common in ſalt marſhes, and flowers in June.

C. Bauhine calls it *Gramen junceum ſpicatum ſive Triglochin*.

2. Sea ſpiked Graſs, *Gramen maritimum ſpicatum*. Small, and with very numerous, narrow leaves.

GENUS XXVI.

COTTON GRASS.

LINAGROSTIS.

THE flowers conſiſt only of filaments, three to each, which are ſeparated from one another in the cluſter by ſmall, oblong leaves. The ſeed is ſingle, and is ſurrounded with long threads.

Linnæus places this among the *triandria*, and gives it the name *eriophorum*. Others call it *gramen tomentoſum*.

1. Cotton Graſs.

Linagroſtis vulgaris.

The root is compoſed of numerous fibres.

The leaves are graſſy, narrow, and of a deep green.

The ſtalk is a foot and half high, of a purpliſh brown at the bottom, and of a fine green upwards.

The flowers ſtand at the top, and are ſmall and inconſiderable; but the filaments which ſurround the ſeeds are long, white, and cottony.

It is common on bogs, and flowers in Auguſt.

C. Bauhine calls it *Gramen tomentoſum paniculâ ſparſâ.*

We have only one other ſpecies of it.

2. Hair's-tail Ruſh, *Juncus Alpinus cum cauda leporina.* This is a proper *linagroſtis*; the head truly woolly.

GENUS XXVII.

CAT'S-TAIL.

TYPHA.

THE flowers are male and female on the ſame plant. The male flowers are ranged in great numbers in a catkin, which terminates the ſtalk; and the female flowers are placed in a long body, alſo of the catkin kind, which cloſely ſurrounds it in a compact, firm ſubſtance. The male flowers are compoſed each of three narrow leaves, with the ſame number of filaments, which are cloſely arranged in the upper catkin. The female, which are lodged in the compact ſubſtance, have for a cup numerous hairs of a pappous ſtructure, and within theſe a rudiment of a fruit fixed on a filament. This ripens into a ſingle ſeed, and there grow numerous capillary filaments from that which ſupports it. Theſe together make the thick ſubſtance called the *cat's-tail.*

Linnæus places this among the *monœcia triandria.*

1. Cat's-tail.

Typha vulgaris.

The root creeps under the ſurface, and has many fibres.

The leaves are long, and of a fine green.

The ſtalk is four feet high; and at its top ſtand the female flowers in a very thick ſpike, terminated by the male catkin; the whole of a fine velvety brown.

It is common by waters, and flowers in Auguſt.

C. Bauhine calls it *Typha paluſtris major.*

We have two other ſpecies.

2. The middle Cat's-tail, *Typha paluſtris media.* The ſpike is much ſlenderer than in the other.

3. The leaſt Cat's-tail, *Typha paluſtris minor.* The ſpike in this is thick and ſhort, and blackiſh.

GENUS XXVIII.

BUR REED.

SPARGANIUM.

THE flowers are of two kinds, male and female, on the ſame plant. The male flowers are collected into a roundiſh button, and conſiſt each of a three-leaved cup, with three filaments. The female flowers are numerous, and fixed to a round receptacle: theſe have no cup, but conſiſt only of a rudiment of a ſeed veſſel: theſe alſo are collected into rounded heads.

1. Bur Reed.

Sparganium vulgare.

The root is creeping, and has many fibres.

The leaves are of a bright green.

The ſtalk is two feet high, and divided into many branches.

The flowers are whitiſh; and the fruit is round, green, hard, and echinated.

It is common by waters, and flowers in June.

C. Bauhine calls it *Sparganium ramoſum.* Others, *Sparganium vulgare.*

We have two other ſpecies.

Bur Reed, not branched, *Sparganium non ramoſum.* Smaller, and with an upright ſtalk.

3. The leaſt Bur Reed, *Sparganium minimum.* The leaves are very long, and the heads ſmall.

GENUS XXIX.

ACORUS.

THE flowers are ranged together on a long and elegant receptacle, of the ſhape and bigneſs of a finger: they are compoſed each of ſix hollow, obtuſe leaves, with the ſame number of threads. The ſeed-veſſel is ſhort, triangular, and contains ſeveral oblong, oval ſeeds.

Linnæus ranges this among the *hexandria monogynia*; the filaments being three, and the ſtyle ſingle.

Common Acorus.

Acorus vulgaris.

The root is long, thick, and creeping; and is of a pleaſing, warm, and aromatick taſte.

The leaves are two feet long, of a yellowiſh green.

The catkin is of a yellowiſh brown.

We have it by ponds in ſome parts of England.

C. Bauhine calls it *Acorus verus ſeu Calamus aromaticus officinarum.*

The root is ſtomachick and deobſtruent; but it does not in our cold climate attain its full virtue.

The END of the THIRTY-SECOND CLASS.

THE

THE

BRITISH HERBAL.

CLASS XXXIII.

TREES and SHRUBS.

THE vegetables of this claſs carry their diſtinction in the moſt obvious manner in their outer form; yet modern ſyſtems do not preſerve them ſeparate. The late writers in general place in the ſame claſſes thoſe trees and herbaceous plants, whoſe flowers have the ſame number of filaments: but in this work, intended to familiariſe the ſcience, we have kept them, as they are in nature, diſtinct.

SERIES I.

TREES whoſe male and female flowers are ſeparate.

GENUS I.

THE WALLNUT.

NUX.

THE male flowers are in catkins; and each is divided into ſix parts. The female flowers ſtand two or three together on other parts of the tree: each conſiſts of a cup, divided into four parts, with a ſingle petal, divided alſo into four parts, and an oval rudiment, which afterwards becomes the fruit, conſiſting of a fleſhy covering, with a ſhelly ſubſtance within, encloſing an uneven kernel.

1. The Wallnut Tree.

Nux vulgaris.

The tree riſes to a great height, and ſpreads irregularly into branches.

The leaves are pinnated; the pinnæ vaſt, oblong, and of a fine green.

The catkins are browniſh, with a tinge of green, and the fruit covered with a green rind.

It is wild in Scotland; and is planted every where for the fruit.

The ſkin ſurrounding the kernel is a good aſtringent.

GENUS II.

HAZLE.

CORYLUS.

THE male flowers are in catkins, and conſiſt of numerous filaments: they are ſeparated by ſcales, divided at the top into three parts, which turn back. The female flowers ſtand at a diſtance from theſe, and are encloſed in a bud. The cup is formed of two leaves, and is ragged at the edges: theſe are ſo ſmall as to be ſcarce diſtinguiſhable. From the rudiment of the fruit riſe two feathered and coloured ſtyles. The fruit is a nut, contained in the cup, which enlarges greatly.

The Hazle.
Corylus vulgaris.

This is a ſhrub of ten feet high.
The bark is brown.
The leaves are roundiſh, rough on the ſurface, ſerrated, and ſharp-pointed.
The catkins are brown, and the female flowers are red.
It is common in hedges and woods.
C. Bauhine calls it *Corylus vulgaris.*

GENUS III.

BEECH.

FAGUS.

THE male flowers compoſe a kind of globular catkin: they are formed of a one-leaved cup, divided into five parts; and have no petals, but numerous filaments. The female flower is enclоſed in a bud; and conſiſts of a cup, divided into four ſegments, which afterwards harden, and form a covering or ſhell to the fruit. This is compoſed of large ſeeds laid cloſe together.

The Beech.
Fagus vulgaris.

The tree is large, the bark ſmooth and pale.
The leaves are broad, ſhort, and of a duſky green.
The flowers are greeniſh; and the fruit, or maſt, when ripe, is hard and brown.
It is common in woods.
C. Bauhine, and all others, call it *Fagus.*

GENUS IV.

CHESNUT.

CASTANEA.

THE male flowers are diſpoſed in long catkins, and are of the ſame ſtructure with thoſe of the beech. The female flowers are alſo of the ſame form with thoſe of beech: the fruit is larger.

Common Cheſnut Tree.
Caſtanea vulgaris.

The tree is large, and ſpreads out into many branches.
The leaves are long, ſerrated, ſharp-pointed, and of a beautiful dark green.
The catkins are of a whitiſh green, and the fruit very large.
It is wild in ſome of our woods, and cultivated every where for its fruit.
C. Bauhine calls it *Caſtanea ſylveſtris.*

GENUS V.

OAK.

QUERCUS.

THE male flowers make a looſe catkin: each conſiſts of a cup, divided into five ſegments, and ſeveral threads. The female flowers are encloſed in a kind of buds. The cup is half round, and undivided; and contains an oval rudiment, which afterwards becomes the acorn.

1. The Oak.
Quercus vulgaris.

The tree grows to a vaſt height and bigneſs, ſpreading into innumerable and irregular branches.
The leaves are large, oblong, obtuſe, deeply ſinuated, and of a dark green.
The fruit needs no deſcription.
We have one other ſpecies, diſtinguiſhed by the ſhortneſs of the footſtalk, which ſupports the acorn.

2. Oak, with acorns on ſhort footſtalks, *Quercus latifolia mas brevi pediculo.*

GENUS VI.

FIR.

ABIES.

THE male flowers are diſpoſed in racemous catkins; and conſiſt only of filaments, with the ſcaly parts of the bud as cups. The female flowers are arranged many together in a common cup, of a conic form, and conſiſt only of a rudiment of a fruit, with a ſhort ſtyle: one is lodged under every ſcale of the cone.

The Yew-leaved Fir.

Abies conis furfum flectentibus.

The trunk is thick, and covered with a reddish brown bark.

The branches are numerous, and spreading.

The leaves grow in two series, resembling those of the yew-tree; and are of a deep green above, and of a silvery grey below.

The cones are large, brown, and stand upwards.

We have it in Scotland, and some other places.

C. Bauhine calls it *Abies conis furfum flectentibus lus sive mas.*

We have one other species also native:

The common Fir or Pitch tree, *Abies rubra.* Its leaves grow irregularly, and the cones hang downwards.

What is called the *Scotch fir* is distinct from both these: it is the *wild pine.* The leaves are long and bluish.

GENUS VII.

ALDER.

ALNUS.

THE male flowers are disposed in cylindrick catkins, and three are placed on each scale of the cup. Each is formed of a single minute leaf, cut at the edge into four segments. The female flowers are placed in oval catkins; and have no petals, but rudiments of seeds under the scales of the catkin, which afterwards becomes a small cone.

The Alder.

Alnus vulgaris.

It is naturally a shrub of free growth.

The bark is glossy and purplish.

The leaves are large, roundish, and clammy; and the cones are brown.

It is common by waters.

C. Bauhine calls it *Alnus rotundifolia glutinosa viridis.*

We have a variety of this called the *fastigiate alder*; in which there are red membranes under the cones, owing to accident.

GENUS VIII.

BIRCH.

BETULA.

THE male flowers are placed in cylindrick catkins; and are formed of a single petal, divided into four oval segments; three of these stand on each scale of the cup. The female flowers consist only of rudiments of seeds, placed among the scales of oblong catkins.

Linnæus places this and the former among the *monœcia tetrandria.*

The Birch Tree.

Betula.

The tree is tall and regular in growth.

The bark is smooth and glossy, pale on the body, but purplish at the twigs.

The leaves are oval, pointed, serrated, and glossy.

It is common in woods.

All authors call it *Betula.*

GENUS IX.

SWEET GAUL.

GALE.

THE male flowers are placed in a loose, oval catkin, and consist only of filaments under the scales of the catkin. The female flowers are disposed in the same manner on different plants, and have only a rudiment of a fruit, which, when ripened, is dry, skinny, and compressed at top.

Sweet Gaul.

Gale.

It is a low shrub of a foot and half.

The bark is smooth, and deep coloured.

The twigs are slender; the leaves are oblong, undivided, and of a pale green.

The flowers are brown.

We have it in boggy ground.

C. Bauhine calls it *Rhus myrtifolia Belgica.*

The leaves, where bruised, have a woodily aromatick smell.

GENUS X.

JUNIPER.

JUNIPERUS.

THE male flowers are placed in long catkins by threes; and they have each a [illegible] at the base: beſides this there are only filaments. The female flower has a cup cut [illegible] into three parts, and three hard pointed petals. The fruit is a round berry, containing three [illegible]

Linnæus places this among the *dioecia monadelphia*.

Common Juniper.

Juniperus communis.

It is commonly a ſhrub of ſix feet high, but will riſe to a tree in ſome places.

The branches are numerous.

The leaves are ſet very thick, and they are ſmall, narrow, of a pale green, and ſharp at the point.

The male flowers grow on ſome trees, and the fruit on others: this is a round, purpliſh berry, covered with a grey powder.

We have it common on [illegible].

C. Bauhine calls it [illegible].

The berries are an excellent cordial [illegible] and diuretick; as is alſo the wood.

We have two other ſpecies.

1. Dwarf Mountain Juniper, [illegible]. The leaves of this are broader than [illegible] other.
2. Savin, or Sabine. This is [illegible] two-[illegible] with [illegible] proceeding the [illegible].

GENUS XI.

BLACK EMPETRUM.

EMPETRUM.

THERE are three kinds of flowers, male, female, and hermaphrodite, all on diſtinct plants. The male flower has a cup divided into three parts, and three ſmall, oval petals; this is ſucceeded by a berry. The male flowers are formed as the hermaphrodite, but have no rudiment of a fruit, nor are ſucceeded by any berry. The female have all the parts of the hermaphrodite flowers, but no filaments.

Linnæus places this among the *triœcia*. The farina from the male flower impregnates the female; and the hermaphrodite impregnate themſelves.

Black berry'd Empetrum.

Empetrum fructu nigro.

The ſhrub is low and ſmall; the branches trail upon the ground, and the bark is red and gloſſy.

The leaves ſtand thick and irregularly, and are oval, ſhort, and pointed.

The berries are black and ſhining.

We have it on boggy heaths.

C. Bauhine calls it *Erica baccifera procumbens nigra*. Others, *Empetrum nigrum*. Our people, *Crowberries*, and *Crakeberries*.

GENUS XII.

BOX.

BUXUS.

THE male flowers riſe from the buds of the branches, and are formed of two roundiſh hollowed leaves, placed in a three-leaved cup. The female flowers grow among them, and have a four leaved cup and three petals. The ſeed veſſel is round, and has three beaks.

Linnæus places this among the *monœcia tetrandria*.

1. Common Box.

Buxus vulgaris.

It is naturally a buſhy, low ſhrub.

The bark is pale; the wood yellow; the leaves hard, roundiſh, and firm.

The flowers are of a greeniſh white.

It is wild in Kent and elſewhere.

C. Bauhine calls it *Buxus arboreſcens*.

The wood has the virtues of guaiacum, as a ſudoriſick and ſweetener of the blood.

We have another ſpecies.

2. Narrow-leaved Box, *Buxus angustifolia*. The leaves ſharper at the point, and the branches fewer.

GENUS

GENUS XIII.

SEA BUCKTHORN.

RHAMNOIDES.

THE male flower has a cup formed of one leaf, divided into two parts, and whole at the bottom: the points of the two ſegments converge; but they gape at the ſides: there are no petals, but only four filaments in this: the female flower has a tubular cup, divided alſo into two parts at the edge; and in it a rudiment of the ſucceeding berry.

Sea Buckthorn.

Rhamnoides.

It is a ſhrub of eight feet high.

The branches are numerous, and the bark is pale.

The leaves are long and narrow, of a pale green on the upper ſide, and of a ſilvery grey underneath.

The flowers are greeniſh and the berries yellow.

We have it on the ſea-coaſts.

C. Bauhine calls it *Rhamnus ſalicifolio anguſto.*

GENUS XIV.

YEW.

TAXUS.

NEITHER the male nor female flower have cup or petals. The male conſiſts of numerous filaments united at their bottom; the female of a rudiment of the fruit. This is ſingular, and unlike that of all known plants, a ſingle ſeed covered with a firm ſkin, and ſurrounded by a juicy ſubſtance.

Linnæus places this among the *dioecia monadelphia.*

The Yew-Tree.

Taxus vulgaris.

It grows to an irregular tree, ſpreading wildly into branches.

The leaves are long, narrow, and placed with a beautiful regularity.

The flowers are yellowiſh.

The berries are ſurrounded with a ſweet juicy matter.

We have it in woods, but more in gardens.

All authors call it *Taxus.*

The leaves are poiſonous; but the wood, if it grew with more regularity, would be very valuable.

GENUS XV.

POPLAR.

POPULUS.

THE male flowers have no petals: they are placed in catkins, and conſiſt of a nectarium, which is hollow, and cut off obliquely at the top ſo as to form an oval rim; and with this eight filaments with large buttons, but no rudiment of a ſeed-veſſel. The female flowers are formed and diſpoſed as the male; but they have the rudiment of a ſeed-veſſel, and no filaments. The ſeed-veſſels are oval, and the ſeeds downy.

The White Poplar.

Populus alba.

The tree is tall, and its bark whitiſh.

The leaves are large, broad, ſinuated, and hung on long footſtalks: they are of a deep green on the upper ſide, and white underneath.

The flowers are browniſh.

We have it by waters.

C. Bauhine calls it *Populus alba majoribus foliis.*

We have two other ſpecies.

1. The black poplar, *Populus nigra.* The leaves divided like ivy, and of a blackiſh green.
2. The Aſpen-tree, or trembling Poplar, *Populus tremula.* The leaves roundiſh, on very long, ſlender footſtalks.

GENUS XVI.

WILLOW.

SALIX.

THE male flowers are placed in catkins, and conſiſt of a hollow nectarium and two filaments. The female flowers are hung in catkins, like the male, and conſiſt only of a rudiment of a fruit. The ſeed-veſſel is oval and pointed. The ſeeds are downy.



The Wallnut Tree?



The Hazle?



The Beech?



The Chesnut?



The Oak?



The Yew Tree? The Spruce Fir?



The Alder?



The Birch Tree?



Sweet Gaule? Common Juniper.



Savine? Black berried Empetrum



Common Box



Sea Buckehorn?



The Yew Tree.

The White Poplar.



The Aspen Tree.



Common White Willow. The Horn Beam. The Elm.



The Wild Pear.



The Silver Service. The Common Service.



The Quicken Tree. The white Beam

1. Common White Willow.
Salix alba vulgaris.

This will grow to a large tree.

The bark is rough, and of a pale brown on the trunk, and on the branches of a whitiſh grey.

The leaves are long, narrow, ſharp-pointed, and of a whitiſh colour.

The catkins are browniſh.

It is common by waters.

C. Bauhine calls it *Salix alba arboreſcens.*

We have twenty-one other ſpecies.

2. Low, hoary long-leaved Willow, *Salix pumila rhamni ſecundi cluſii folio.* A very ſmall ſhrub.
3. Woolly, white-leaved Dwarf Willow. *Salix pumila foliis utrinque candicantibus.* The leaves oblong, and white on both ſides.
4. Dwarf, narrow-leaved Willow, woolly underneath, *Salix pumila anguſtifolia inferna parte lanuginoſa.*
5. Common, creeping Dwarf Willow, *Salix pumila anguſtifolia prona parte cinerea.* The leaves very narrow.
6. Round-leaved Dwarf Willow, *Salix apina pumila rotundifolia repens.* The leaves white underneath.
7. Alder-leaved Mountain Willow, *Salix alpina alni rotundo, folio repens.* The leaves green on both ſides.
8. Crack Willow, *Salix folio longo latoque ſplendente fragilis.* The leaves yellowiſh, the branches brittle.
9. Round-eared, ſhining Willow, *Salix folio auriculato ſplendenſe.* The leaves oblong, with round appendages.
10. Almond-leaved Willow that caſts its bark, *Salix folio amygdalino utrinque aurito cortem abjiciens.*
11. Yellow Dwarf Willow, *Salix humilior foliis anguſtis ſubcæruleis ex adverſo binis.* The bark yellow.
12. Bay-leaved Sweet Willow, *Salix folio laureo, ſeu lato glabro odorato.* The leaves ſweet ſcented.
13. Round-leaved, mountain Dwarf Willow, *Salix pumila folio rotundo.* The leaves thick and blackiſh.
14. Long, entire-leaved Willow, *Salix minime fragilis foliis longiſſimis utrinque viridibus non ſerratis.*
15. Common Sallow, *Salix latifolia et rotunditate acuminata.* In hedges, the leaves of a pale green and rough.
16. Round-leaved Sallow, *Salix latifolia folio rotundo.* Common in hedges with the former.
17. Small-leaved Sallow, *Salix folio rotundo minore.* The leaves ſmall, and of a pale green.
18. Creeping Sallow, *Salix caprea pumila folio ſubrotundo incano.* Scarce a foot high.
19. Long-leaved Sallow, *Salix caprea acuto longo queſolio.* The leaves long and pointed.
20. Sallow with a ſhining leaf, *Salix latifolia folio ſplendente.* A low kind with yellow bark.
21. The Oſier, *Salix folio longiſſimo.* The leaves extremely long, and the twigs tough.
22. Long-leaved, yellowiſh Sallow, *Salix folio longo ſubluteo non auriculato viminibus lutcis.*

GENUS XXIII.

HORNBEAM.

OSTRYA.

THE male flowers are placed in a cylindrick catkin: they conſiſt only of filaments growing from the ſcales of the catkin. The female are placed in an oblong catkin, and conſiſt of only a rudiment of the fruit.

The Hornbeam.
Oſtrya ulmo ſimilis.

The tree is of a moderate growth:

The leaves are oblong, of a fine green, ſerrated at the edges, and placed upon ſhort foot-ſtalks.

The flowers are inconſiderable; but the fruit is large and foliaceous.

We have it in ſome of our woods.

C. Bauhine calls it *Oſtrya ulmo ſimilis.* Others, *Carpinus.*

SERIES II.

Trees and ſhrubs which have fruit after all the flowers.

GENUS I.

The APPLE.

MALUS.

THE flower is placed in a cup divided into five ſegments; and is compoſed of five large, roundiſh petals. The fruit is roundiſh, fleſhy, and contains ſeveral oblong ſeeds.

Linnæus places this among the *icoſandria pentagynia*; the filaments being numerous and inſerted in the cup, and the ſtyles five.

The Crab.

Malus ſylveſtris vulgaris.

The ſhrub is tough, and ſpreads into many branches, which are knotty, and covered with a purpliſh rind.

The leaves are broad, ſhort, pointed, and of a deep green.

The flowers are large and fleſh-coloured; their buds very red.

It is common in hedges.

C. Bauhine calls it *Malus ſylveſtris.*

GENUS II.

PEAR.

PYRUS.

THE flower is placed in a cup, divided into five ſegments, and is compoſed of five large petals. The fruit is oblong, fleſhy, and has within ſeveral oblong ſeeds.

Linnæus places this with the former.

The wild Pear-Tree.

Pyrus ſylveſtris.

The tree is tall and ſpreading.

The bark is rough and brown.

The leaves are broad, oblong, and of a pale green.

The flowers are large and white.

The fruit is yellow, and harſh to the taſte.

We have it in hedges in the north of England.

C. Bauhine calls it *Pyrus ſylveſtris.*

GENUS III.

SERVICE.

SORBUS.

THE flower is placed in a cup, divided into five light ſegments, and is compoſed of five broad petals. The fruit is ſoft, roundiſh, and umbilicated; and the ſeeds are three.

Linnæus places this among the *icoſandria pentagynia.*

1. The True Service.

Sorbus legitima.

The tree grows to a conſiderable ſize, and ſpreads out into many branches.

The leaves are beautifully diſpoſed, and are pinnated, oblong, ſharp-pointed, and of a fine green.

The flowers ſtand in cluſters; and are ſmall and white.

The fruit is large, oblong, pear-ſhaped, and brown.

We have it in woods in Staffordſhire.

C. Bauhine calls it *Sorbus ſativa.*

The fruit when mellow is very pleaſant.

We have two other ſpecies.

1. The common Service, *Sorbus terminalis.* The leaves broad, and deeply divided; and the fruit ſmall.
2. The Quicken-tree, *Sorbus ſylveſtris foliis domeſticæ ſimilis.* The leaves like thoſe of the aſh, and the fruit red.

GENUS

GENUS IV.

MESPILUS.

THE flower is placed in a cup, lightly divided into four ſegments; and is compoſed of five roundiſh petals, with numerous filaments. The fruit is fleſhy, roundiſh, and umbilicated.
Linnæus places this among the *icoſandria pentagynia*.

1. The White Beam.
Meſpilus alnifolio ſubtus incano.

The tree grows to a moderate bigneſs.
The bark is pale and ſmooth.
The leaves are oblong, broad, obtuſe, and lightly dented: of a dark green on the upper ſide, and whitiſh underneath.
The flowers are ſmall and white; and the fruit is ſmall and roundiſh.
We have it in our weſtern counties.

C. Bauhine calls it *Alni effigie lanato folio:* but its moſt uſual name is *Aria Theophraſti.*

We have three other ſpecies of *Meſpilus.*

1. The common White Hawthorn, *Meſpilus apii folio vulgaris ſpinoſa.*
2. Oblong-leaved Meſpilus, *Meſpilus vulgaris folio laurino.*
3. Great-leaved Meſpilus, *Meſpilus foliis et fructu majoribus.*

GENUS V.

ROSE.

ROSA.

THE flower is placed in a large cup, thick, and rounded at the baſe, and divided at the edg into five long ſegments; and it is compoſed of five broad petals, with numerous filaments. The fruit is formed of the thick baſe of the cup; and contains many ſeeds.
Linnæus places this among the *icoſandria polygynia.*

The Burnet Roſe.
Roſa pumila ſpinoſiſſima foliis pimpinella.

This is a little but very pretty ſhrub.
The branches are tough, and their bark is browniſh.
The leaves are pinnated, and the pinnæ are ſhort, ſerrated, and roundiſh: their colour is a dark green.
The flowers are large, and of a very pale fleſh colour.
The fruit is ſmall, red, and roundiſh.
It is common in hedges, and flowers in June.
C. Bauhine calls it *Roſa ſylveſtris pomifera.* Others, *Roſa foliis pimpinellæ.*

We have five other ſpecies.

1. The common Briar, or Dog-roſe, *Roſa ſylveſtris inodora, ſive canina.* Common in all hedges.
2. Wild Briar with large, prickly hips, *Roſa ſylveſtris fructu majore hiſpido.* In hedges.
3. Sweet Briar, *Roſa ſylveſtris odora.* We have this wild in our ſouthern counties.
4. White-flowered Dog-roſe. *Roſa ſylveſtris minor flore albo.* The leaves broader and ſhorter.
5. The great Engliſh Apple-roſe, *Roſa ſylveſtris pomifera major.* The fruit as big as a ſmall pear.

GENUS VI.

CURRANT.

RIBES.

THE cup is rounded, ſwoln, and divided into five ſegments. The flower conſiſts of five ſmall, roundiſh petals. The fruit is rounded, juicy, and contains many ſeeds.
Linnæus places this among the *pentandria monogynia.*

We have four ſpecies wild in our northern counties.

1. The common Currant, *Ribes vulgaris fructu rubro.* Cultivated alſo every where in gardens.
2. The ſweet Currant, *Ribes vulgaris fructu dulci.* The leaves broader and larger.
3. Small-fruited Currant, *Ribes fructu parva.* The fruit and leaves both very ſmall.
4. The black Currant, *Ribes nigrum.* The leaves of an ill ſmell.

The jelly of this cures ſore throats.

GENUS VII.

WHORTLE.

VITIS IDEA.

THE cup is placed on the rudiment of the fruit, and is very ſmall. The flower is formed of a ſingle petal, and is divided into four ſegments at the rim, which turn back. The body of it is hollow. The fruit is a round berry, in which are ſeveral ſeeds in four cells.

1. The red Whortle.

Vitis idea fructu rubro.

This is a ſmall ſhrub, with ſlender, purpliſh branches.

The leaves are roundiſh, and of a dark green; obtuſe at the ends, and not at all ſerrated at the edges.

The flowers are greeniſh, with a tinge of red.

The berries are round, red, and well taſted.

It is common in our northern counties on boggy ground.

C. Bauhine calls it *Vitis idea foliis ſubrotundis non crenatis baccis rubris.*

We have three other ſpecies.

1. The great Billberry-buſh, *Vitis idea magna.* The ſhrub is larger, and the berries round and black.
2. Angular-ſtalked Billberry-buſh, *Vitis idea anguloſa.* The twigs green and ridged; and the berries black.
3. Myrtle-leaved Billberry-buſh, *Vitis idea foliis myrtinis criſpis.* The leaves curled, and the fruit black.

GENUS VIII.

HONYSUCKLE.

CAPRIFOLIUM.

THE cup is ſmall, and divided into five parts. The flower is formed of a ſingle petal, which is tubular, long, and ſlender; and at the rim divided into five ſegments, which turn back. The fruit is a roundiſh, umbilicated berry.

Linnæus places this among the *pentandria monogynia.*

1. Common Honeyſuckle.

Caprifolium vulgare.

The ſhrub is ſmall; the branches tough, ſlender, weak, and climbing.

The leaves are oblong, large, and of a bluiſh green.

The flowers ſtand in handſome tufts at the tops of the branches; and are of a fine pale yellow with ſome white among it.

The berries are red.

It is common in hedges, and flowers in July.

C. Bauhine calls it *Caprifolium non perfoliatum Germanicum.*

We have one other ſpecies.

2. Oak-leaved Honeyſuckle, *Caprifolium non perfoliatum foliis ſinnatis.* The leaves deeply ſinuated.

GENUS IX.

IVY.

HEDERA.

THE cup is very ſmall, and has five dents at the edge. The flower is compoſed of five oblong petals, with crooked tips. The fruit is a round berry.

Linnæus places this among the *pentandria monogynia.*

Common Ivy.

Hedera vulgaris.

The ſtem is woody, and climbs; fixing itſelf by tendrils, in manner of roots.

The leaves are of a blackiſh green, and various figure; ſome oblong and ſimple; others divided into three lobes.

The flowers are placed in tufts, and are of a greeniſh white.

The berries are black.

It is common in hedges and againſt walls of old buildings.

C. Bauhine calls it *Hedera arborea.*

GENUS X.

WATER ELDER.

OPULUS.

THE flowers are placed in umbells on ſubdivided branches. The cup is minute, and dented in five places at the edge. Each flower is formed of a ſingle petal, divided into five ſegments, which turn backward. The fruit is a roundiſh berry.

Linnæus places this among the *pentandria trigynia*.

The Water Elder.

Opulus vulgaris.

It is a weak ſhrub of five feet high.

The branches are numerous, and their bark brown.

The leaves are broad, and of a faint green; irregularly divided into three lobes, and ſerrated.

The flowers are white; and the berries red.

It is common by waters.

C. Bauhine calls it *Sambucus aquatica flore ſimplici.*

GENUS XI.

WAYFARING-TREE.

VIBURNUM.

THE flowers are diſpoſed in ſmall umbells. The cup is minute, and divided by five dents at the edge. The flower is formed of a ſingle petal, divided into five obtuſe ſegments; and theſe turn back. The fruit is a roundiſh berry, containing a ſingle ſeed.

Linnæus places this among the *pentandria trigynia*.

The Wayfaring-Tree.

Viburnum.

The tree is of moderate ſtature, and its bark is brown.

The twigs are whitiſh and very tough.

The leaves are broad, roundiſh, and of a whitiſh green on the upper ſide, and white and mealy underneath.

The flowers are white, and the berries, when ripe, are black.

We have it in hedges, principally in our ſouthern counties.

C. Bauhine calls it *Viburnum.*

GENUS XII.

DOGBERRY-TREE.

CORNUS.

THE flowers are placed in ſmall umbells, and have a little cup divided by four indentings at the rim. Each is compoſed of four ſmall, oblong, and pointed petals. The fruit is an oblong berry, containing a ſtone with two kernels.

Linnæus places this among the *tetrandria monogynia*.

The Common Dogberry-Tree.

Cornus Fœmina.

This is a ſhrub of five feet high.

The twigs are tough, and covered with a red bark.

The leaves are oblong, undivided, and of a duſky green.

The flowers are ſmall and white; and the berries, when ripe, are black.

It is common in hedges.

C. Bauhine and others call it *Cornus fœmina.*

GENUS XIII.

ELDER.

SAMBUCUS.

THE flowers are placed in large umbells. The cup is ſmall, and divided into five parts at the edge. The flower itſelf is formed of a ſingle petal; and is hollow, and divided into five ſmall ſegments, which turn backwards. The berry is roundiſh, and contains three ſeeds.

Linnæus places this among the *pentandria trigynia*.

1. Jagged-leaved Elder.

Sambucus foliis laciniatis.

The ſhrub grows irregularly to ten or twelve feet high.

The bark is whitiſh and rough.

The young ſhoots are thick, green, and tender.

The leaves are placed on divided footſtalks; and are themſelves alſo parted into ſeveral oblong, jagged, and indented ſegments.

The flowers are white; and the berries, when ripe, are black.

We have it in hedges, but not common. It flowers in July.

C. Bauhine calls it *Sambucus laciniato folio.*

We have three other ſpecies wild in England.

1. The Common Elder, *Sambucus vulgaris.* The berries black.
2. The White-berried Elder, *Sambucus baccis albis.* The berries of a greeniſh white.
3. The Dwarf Elder, *Ebulus, ſive Sambucus humilis.* A very powerful diuretick.

GENUS XIV.

SLOE.

PRUNUS.

THE cup is divided into five oblong, hollow ſegments. The flower is compoſed of five broad petals. The fruit is roundiſh, with a longitudinal furrow; and contains under a fleſhy ſubſtance an oblong ſtone with a kernel.

Linnæus places this among the *icoſandria monogynia.*

The Common Sloe.

Prunus ſylveſtris vulgaris.

The ſhrub is rarely more than four feet high.

The branches are thorny, and have a deep brown bark.

The leaves are oblong, broad, and of a fine green.

The flowers are white; and the fruit, when ripe, is covered with a grey duſt.

It is common in hedges, and flowers in July.

GENUS XV.

CHERRY.

CERASUS.

THE cup is hollow, and divided into five ſegments at the edge. The flower is compoſed of five broad, hollowed petals. The fruit is roundiſh, with a furrow; and contains a roundiſh ſtone.

1. The Cluſter, or Birds Cherry.

Ceraſus avium racemoſa.

This riſes to a ſmall tree.

The bark is pale on the trunk, and darker on the branches.

The leaves are oblong and ſerrated.

The flowers ſtand in long cluſters, and are white.

The fruit is ſmall.

We have it in woods in the north of England.

C. Bauhine calls it *Ceraſus racemoſa ſylveſtris.*

We have four other ſpecies.

1. The Common, wild, red Cherry, *Ceraſus ſylveſtris fructu rubro.* Much like the Flemiſh cherry.
2. The black Cherry-tree, *Ceraſus ſylveſtris fructu nigro.* The common, ſmall, black Cherry.
3. Small, wild, Heart Cherry, *Ceraſus ſylveſtris fructu minimo cordiformi.* In Wales.
4. The late wild Cherry, *Ceraſus ſylveſtris ſeptentrionalis fructu parvo ſerotino.* The fruit round and red.

GENUS XVI.

STRAWBERRY-TREE.

ARBUTUS.

THE cup is very ſmall, and is divided by five indentings at the edge. The flower is formed of a ſingle petal; and is hollow, oval, and divided at the rim into five ſegments, which turn back. The fruit reſembles a *common ſtrawberry*; but the ſeeds are within, not on the ſurface.

Common Strawberry-Tree.

Arbutus vulgaris.

It is a ſmall tree; or oftener riſes in the ſhrub form.

The leaves are oblong, and very beautifully ſerrated.

The flowers are greeniſh.

The berries, when ripe, are red.

It is wild in our northern counties.

The fruit ripens in November.

C. Bauhine calls it *Arbutus folio ſerrato.*

GENUS

GENUS XVII.

MISLETOE.

VISCUM.

THE flowers are often ſeparately male and female, but not conſtantly ſo: they conſiſt of a ſmall cup, divided into four oval parts; with either filaments without a rudiment of the fruit, or with a rudiment without filaments, or both together: in each caſe the form and ſtructure of the flower is the ſame. The fruit is a roundiſh berry, containing a ſingle, flat ſeed, of a heart-like ſhape.

Common Miſletoe.

Viſcum vulgare.

The ſhrub is very much branched, and a foot and half high.

The ſtalks are yellow and tough.

The leaves ſtand in pairs; and they are oblong, fleſhy, yellowiſh, and obtuſe.

The flowers are ſmall and greeniſh.

The berries are white, and full of a ſlimy juice.

It is common on apple-trees, and other kinds growing to their branches as moſs.

C. Bauhine calls it *Viſcum baccis albis.*

It is an excellent medicine againſt diſorders of the nerves. That of the oak is preferred, but it is very rarely found.

GENUS XVIII.

SPURGE LAUREL.

LAUREOLA.

THE flowers riſe naked, three from each bud, and are compoſed of a ſingle petal, tubular and divided at the edge into four ſegments. The fruit is a roundiſh berry with a ſingle ſeed.

Common Spurge Laurel.

Laureola vulgaris.

It is a low ſhrub, green all the year.

The bark is browniſh.

The leaves are long, and of a fine green, undivided and fleſhy.

The flowers are ſmall and greeniſh.

The berries are black.

We have it on commons.

C. Bauhine calls it *Laureola ſempervirens flore viridi.*

It is a violent vomit and purge.

GENUS XIX.

PRIVET.

LIGUSTRUM.

THE cup is ſmall, and is divided at the rim into four parts. The flower is formed of a ſingle petal, tubular at the baſe, and divided alſo into four ſegments at the edge. The fruit is a round berry containing four ſeeds.

Linnæus places this among the *diandria monogynia.*

Common Privet.

Liguſtrum vulgare.

It is a ſhrub of five feet high.

The ſtem is ſlender, brown, and ſmooth.

The leaves are oblong, and of a dark green.

The flowers are ſmall and white; and they grow in cluſters.

The berries are black.

We have it in woods.

C. Bauhine calls it *Liguſtrum Germanicum.*

GENUS XX.

BLACK ELDER.

FRANGULA.

THE flower has no cup: it is formed of a ſingle petal; and is ſmall, tubular, rough on the outſide, but ſmooth and poliſhed within; and is tinged, and divided into five ſmall ſegments. There is a ſcale at the baſe of each ſegment; and from under each of theſe riſes a filament. The berry is roundiſh, and contains two ſeeds.

The Black Alder.
Frangula vulgaris.

The ſhrub is weak and ſmall.
The ſtem is covered with a ſmooth, brown bark.
The leaves are large, dark, and roundiſh.
The flowers are of a greeniſh white; and the berries, when ripe, are black.
We have it in woods and thickets.
C. Bauhine calls it *Alnus nigra baccifera*. Others, *Frangula*.

GENUS XXI.

BARBERRY.

BERBERIS.

THE cup is formed of ſix ſmall, hollow, coloured leaves. The flower is formed of ſix rounded petals: there are two granules at the baſe of each petal, the nectaria of the flower. The berry is oblong, and has two ſeeds.

The Barberry-Buſh.
Berberis vulgaris.

The ſhrub is ten feet high, and armed with ſharp ſpines.
The bark is pale and whitiſh.
The leaves are broad and oblong; of a freſh green, with a tinge of yellowiſh, and finely ſerrated.
The flowers are ſmall and yellowiſh: the berries red and agreeably taſted.
We have it wild and in gardens.
All authors call it *Berberis*.

GENUS XXII.

HOLLY.

AGRIFOLIUM.

THE cup is ſmall, formed of a ſingle piece, and divided into four ſegments at the edge. The flower is compoſed of four roundiſh petals, cohering at their baſes. The fruit is a roundiſh berry with four ſeeds.

1. The Holly.
Agrifolium.

It is a large ſhrub.
The bark is whitiſh on the trunk; but the young ſhoots are green.
The leaves are oblong, ſinuated, irregular at the edges, and prickly.
The flowers are greeniſh.
The berries are black.
We have it in woods and hedges.
C. Bauhine calls it *Ilex aculeata baccifera folio ſinnato.*

We have one other ſpecies.

2. Yellow-berried Holly, *Agrifolium baccis luteis.* The leaves of a thinner and looſe texture.

GENUS XXIII.

BUCKTHORN.

RHAMNUS.

THE flower has no cup: it is formed of a ſingle petal, and is tubular, and lightly divided by four dents at the edges. There are four little ſcales within: one at each dent. The berry is roundiſh, and the ſeeds are flatted.

The Buckthorn Shrub.
Rhamnus vulgaris.

It is a ſhrub of ten feet high.
The bark is brown.
The leaves are broad, indented, and of a fine green.
The flowers are inconſiderable and greeniſh.
The berries are black.
The ſhrub is full of ſharp thorns.
We have it in hedges.
C. Bauhine calls it *Rhamnus catharticus.*

The juice of the berries is a good purge.

GENUS XXIV.

BRAMBLE.

RUBUS.

THE cup is formed of one leaf, divided into five oblong, ſpreading, permanent ſegments. The flower is compoſed of five roundiſh petals inſerted in the cup. The fruit is compoſed of numerous grains.

The Common Bramble.

Rubus vulgaris.

The ſhrub is weak and trailing.

The branches are beſet with ſharp thorns.

The leaves ſtand three on a footſtalk; and are oblong, broad, ſerrated, and ſharp-pointed.

The flower is large and fleſh-coloured; and the fruit, when ripe, is black.

It is every where in hedges.

C. Bauhine calls it *Rubus vulgaris, ſeu Rubus fructu nigro.*

We have three other ſpecies wild in different parts of England.

1. White-berried Bramble, *Rubus vulgaris major fructu albo.* The leaves longer and paler.
2. The Dewberry-Buſh, *Rubus minor fructu caeruleo.* The fruit compoſed of few grains.
3. The wild Raſpberry, *Rubus idæus ſpinoſus fructu rubro.* In woods in the north.

GENUS XXV.

SPINDLETREE.

EUONYMUS.

THE cup is divided into five roundiſh ſegments. The flower is compoſed of four oval petals. The fruit is a ſquare juicy capſule in each of the four cells, containing a ſingle ſeed.

Spindletree.

Euonymus.

It is a ſmall hedge-ſhrub.

The bark of the trunk is of a pale brown; that on the young ſhoots green: and theſe have four rediſh brown ridges, which make them appear ſquare.

The leaves are oblong, moderately broad, and of a fine freſh green.

The flowers are very ſmall, and greeniſh.

The fruit is large, red, and ſquare.

It is common in hedges.

C. Bauhine calls it *Euonymus vulgaris granis rubris.*

GENUS XXVI.

BLADDERNUT.

STAPHYLODENDRON.

THE cup is divided into five coloured ſegments. The flower is compoſed of five oblong petals. The fruit is compoſed of diſtinct bladders with pointed tops; in each of which are roundiſh ſeeds.

The Bladdernut.

Staphylodrendon.

The tree riſes to no great height.

The leaves are beautifully pinnated; and the pinnæ are oblong, ſerrated, and ſharp-pointed.

The flowers are ſmall.

The fruit is large; and the bladders, when ripe, are of a pale greeniſh colour, tinged with red or brown.

We have it wild in England, but not common.

GENUS XXVII.

ELM.

ULMUS.

THE cup is formed of a ſingle leaf, and divided into five ſegments at the edge: it is rough on the outſide, and, for the greateſt part, tubular, enlarging upwards: there are no petals. The filaments ſtand in this cup; and the fruit is flatted, and has a ſingle ſeed.

The Wych Elm.

Ulmus folio glabro.

The tree grows to a great bigneſs.

The bark is rough.

The leaves are very broad, of a fine green, ſerrated, and ſharp-pointed: and ſmooth on the ſurface.

The flowers are whitiſh, and the fruit brown.

We have it in hedges.

Authors call it *Ulmus folio glabro.*

We have three other ſpecies.

1. The common Elm, *Ulmus vulgaris folio latiſcabro.* The leaves ſhort, broad, and rough.
2. The narrow-leaved Elm, *Ulmus minor folio anguſto ſcabro.* A ſmall tree when at full growth.
3. The broad-leaved Elm, called Witch Hazel, *Ulmus folio latiſſimo ſcabro.*

GENUS XXVIII.

THE ASH.

FRAXINUS.

THE cup is formed of a ſingle piece, divided lightly into four parts at the edge; and the flower is compoſed of four narrow petals. The ſeed is flat, membranaceous, and covered with a cruſt.

The Common Aſh.

Fraxinus vulgaris.

The tree is large, but irregular in growth.

The bark of the trunk is whitiſh; that of the branches grey.

The leaves are long, large, and beautifully pinnated.

The flowers are greeniſh.

The fruit is of a greeniſh brown.

It is common in woods and hedges.

C. Bauhine calls it *Fraxinus excelſior.*

GENUS XXIX.

MAPLE.

ACER.

THE cup is divided into five ſegments, and coloured. The flower is compoſed of five oval petals. The ſeed-veſſel is winged with a large membrane.

Linnæus places this among the *octandria.*

The Common Maple.

Acer vulgare minus.

The ſhrub is of irregular growth.

The bark is rough, and of a rediſh brown.

The leaves are broad, ſhort, and deeply divided: their colour is a pale green.

The flowers are of a greeniſh colour: the ſeed-veſſels are rediſh when ripe.

It is common in hedges.

C. Bauhine calls it *Acer campeſtre.*

We have two other ſpecies.

1. The great Maple, called the Sycamore, *Acer majus latifolium.*
2. Hairy, red-fruited Maple, *Acer compeſtre minus fructu villoſo rubente.*

GENUS XXX.

HEATH.

ERICA.

THE cup is compoſed of four long leaves. The flower is formed of a ſingle petal; and is divided at the rim into four parts. The ſeed-veſſel is roundiſh and ſmall; the ſeeds are numerous and minute.

Beſom Heath.

Erica folio hirſuto quaterno.

The ſhrub is low, ſcarce exceeding a foot in heighth.

The bark is of a rediſh brown.

The leaves are ſmall, extremely numerous, and hairy.

The flowers ſtand in little tufts at the tops of the branches; and are of a faint purple.

We have it on boggy grounds on heaths.

C. Bauhine calls it *Erica ex rubro nigricans ſcoparia.* Our people, *Dutch heath.*

We have five other ſpecies.

1. Common Heath, *Erica vulgaris.* The leaves of a pale green; and the flowers of a faint fleſh-colour.
2. Common rough leaved Heath, *Erica vulgaris hirſuta.* More branched than the former.
3. Five-leaved Heath, *Erica tenuifolia.* The bark grey, and the leaves of a dark green.
4. Fir-leaved Heath with numerous flowers, *Erica foliis corios multiflora.* The flowers of a pale crimſon.
5. Myrtle-Heath, *Erica cantabrica flore maximo foliis myrti ſubtus incanis.* The leaves pointed.

GENUS XXXI.

MARSH CYSTUS.

LEDUM.

THE cup is ſmall, permanent, coloured, and divided into five ſegments. The flower is formed of a ſingle petal; and is hollow, and divided into five ſegments at the rim. The ſeed-veſſel is roundiſh, with five ridges.

Engliſh Marſh Ciſtus.

Ledum paluſtre.

It is a ſmall ſhrub, not much branched.
The leaves are oblong and narrow.

The flowers ſtand on ſhort footſtalks; and are ſmall, and of a beautiful pale red, crowning the tops of the branches.

We have it on boggy grounds in heaths.

C. Bauhine calls it *Viti idæa affinis polii folio.*

GENUS XXXII.

LIME.

TILIA.

THE cup is divided into five ſegments, and is coloured. The flower is compoſed of five oval petals. The fruit is a tough, globular capſule, with five ſeeds in five cells.

Common Lime.

Tilia vulgaris.

The tree is erect, and tolerably regular in growth.

The bark is brown.

The leaves are broad, ſerrated, ſharp-pointed, and of a fine green.

The flowers are white and fragrant.

We have it wild in the north; and it is planted about houſes.

C. Bauhine calls it *Tilia fœmina folio majore.*

We have three other ſpecies.

1. The ſmall-leaved Lime, *Tilia folio minore.* The leaves of a deeper green and finer ſubſtance.
2. The red Lime, *Tilia foliis leviter hirſutis viminibus rubris.* The ridges on the fruit very high.
3. The Elm-leaved Lime, *Tilia ulmi folia fructu hexagono.* The ridges very high and large.

GENUS XXXIII.

BROOM.

GENISTA.

THE cup is ſmall, and has five ſlight dents at the edge. The flower is of the papilionaceous kind, and is formed of five petals; the carina having two. The ſeed-veſſel is a cylindrick pod, with large ſeeds.

1. Common Broom.

Geniſta vulgaris.

The ſhrub is four or five feet high.

The bark on the trunk is of a pale brown.

The young ſhoots are numerous, angulated, and green.

The leaves are ſmall and oblong: they ſtand three together.

The flowers are large and yellow.

It is common on waſte grounds.

C. Bauhine calls it *Geniſta Angloſa.*

2. Diers Broom.

Geniſta tinctoria vulgaris.

This is a low, ſhrubby plant; two feet high, and very much branched.

The leaves ſtand ſingly, and are long, narrow, and of a bright green.

The flowers ſtand in long cluſters at the tops of the branches, and are large and yellow.

We have it in dry paſtures.

C. Bauhine calls it *Geniſta tinctoria Germanica.*

GENUS

GENUS XXXIV.

FURZ.

GENISTA SPINOSA.

THE cup is ſmall, and divided irregularly. The flower is papilionaceous, and has five petals; two forming the carina. The ſeed-veſſel is an oblong pod. The whole ſhrub is covered with thorns.

Common Furz.

Geniſta ſpinoſa vulgaris.

The ſhrub is four or five feet high, and very ſpreading.

The leaves are very ſmall, oblong, of a bluiſh green, and fall ſoon after they appear in ſpring.

The branches are all the year cloathed with innumerable green thorns.

The flowers are large and yellow.

It is common on heaths.

C. Bauhine calls it *Geniſta ſpinoſa major longioribus aculeis.*

We have two other ſpecies.

1. The leſſer Furze, *Geniſta ſpinoſa minor.* The thorns are ſhorter, and it flowers later.
2. Needle Furze, *Geniſta minor aſpalathoides.* The leaves ſmall and of a faint green.

The END of the THIRTY-THIRD CLASS.

THE

The Burnet Rose

The Red Whortle

Common Honeysuckle

Common Ivy

The Water Elder

The Wayfaring Tree

The Dog-berry Tree

The Jagged leaved Elder

The Haw Tree

The Cluster or Birds Cherry

The Black Alder

The Berberry Bush

The Holly

The Buckthorn Shrub

The Common Bramble

The Spindle Tree

The Bladder Nut

The Wych Elm

The Ash

The Common Maple

Broom

Heath

Common Lime

Dicrs Broom

Common Furze

THE

BRITISH HERBAL.

CLASS XXXIV.

Plants whoſe flowers and ſeeds are minute and ſingly inconſpicuous; and are produced on the back of their leaves.

THESE are a ſeries of plants perfectly diſtinct from all others; and they have the fortune to be kept together in the modern arrangements of botany. Their parts of fructification are too minute and obſcure to have given opportunities to thoſe who favour the preſent method, to blend them among the other genera.

Linnæus ranges them with the moſſes and other ſuch kinds under the term *cryptogamia*.

GENUS I.

HARTS-TONGUE.

PHYLLITIS.

THE plant conſiſts of an undivided leaf; and the ſeeds are diſpoſed in long ſtreaks on the back.

1. Common Harts-tongue.

Phyllitis vulgaris.

The root is a tuft of black fibres.

The leaves are numerous; and each is a diſtinct plant:

The footſtalk is ſhort, blackiſh, and downy.

The leaf is very long, hollowed at the baſe, pointed at the end, and of a fine green.

The lines of ſeeds are brown.

It is common in wells and other damp, ſhady places.

There are three varieties of this plant, which have been deſcribed as diſtinct ſpecies.

1. The fingered Harts-tongue, *Phyllitis multifida*. In this the leaves are ſplit into ſeveral ſtrait ſegments at the top. 2. Croſs-jagged Harts-tongue, *Phyllitis cruciata*. The ſegments croſſing one another. And, 3. Dwarf Harts-tongue, *Phyllitis minima*. Two inches high.

GENUS II.

POLYPODY.

POLYPODIUM.

THE leaf has a naked footſtalk, and is divided into long ſegments. The flowers ſtand on the back in round ſpots.

1. Common Polypody.
Polypodium vulgare.

The root is long and thick; and creeps juſt at the ſurface.

The plant is a foot high.

The footſtalk is of a purpliſh brown.

The leaf is of a deep green on the foreſide, and paler behind; and the flowers and ſeeds are placed there in round ſpots of a yelloviſh brown.

It is common in woods and under hedges.

C. Bauhine calls it *Polypodium vulgare.*

The root is a gentle purge.

We have three other ſpecies.

1. Serrated Polypody, *Polypodium murale pinnulis ſerratis.* This has been ſuppoſed a variety but is really a diſtinct ſpecies.
2. Laciniated Polypody of Wales, *Polypodium Cambro Britanicum pinnulis ad margines laciniatis.*
3. Broad Polypody, *Polypodium iluenſe.* On the tops of the Welch mountains.

GENUS III.

ROUGH SPLEENWORT.

LONCHITIS ASPERA.

THE leaf is continued in ſmall ſegments to the baſe of the footſtalk. The leaves that have ripe ſeeds curl up.

Rough Spleenwort.
Lonchitis aſpera vulgaris.

The root is compoſed of innumerable fibres.

The leaves are very long, and narrow; and are divided down to the middle rib into fine ſegments: the colour is a dark green.

The ſegments are longiſh in the middle, and ſmaller to the baſe of the footſtalk, as alſo to the point.

The ſeeds are very numerous, and brown; and the leaves on which they are placed curl up.

It is common on heaths.

C. Bauhine calls it *Lonchitis aſpera minor.*

We have one other ſpecies.

1. Rough Spleenwort, with indented ſegments, *Lonchitis aſpera major.* On the Welch mountains.

GENUS IV.

SMOOTH SPLEENWORT.

ASPLENIUM.

THE leaf is ſimply, and not deeply, divided. The ſegments are obtuſe; and the flowers and ſeeds cover the back of the leaf in a continued maſs.

Common ſmooth Spleenwort.
Aſplenium vulgare.

The root is a tuft of fibres.

The leaves riſe in great cluſters; and they are five inches long, narrow, and ſlightly divided, or ſinuated at the edge.

The ſegments are obtuſe, and not exactly oppoſite to one another.

The foreſide of the leaf is a dark green; the backſide is covered with a brown powder.

We have it on old walls.

C. Bauhine calls it *Ceterach officinarum.*

It is ſuppoſed a remedy for obſtructions of the ſpleen.

GENUS V.

DWARF FERN.

CHAMÆ FILIX.

THE leaf has a naked footſtalk; and is compoſed of many pairs of diſtinct pinnæ. The ſeeds are placed in dots.

Dwarf Sea-Fern.
Chamæ filix maritima.

The root is a tuft of black fibres.

The leaves are numerous, and three inches long: their ſtalk is black.

The pinnæ are of a deep green on the foreſide, and pale behind, with the ſeed in dots.

We have it on old walls at the ſea-ſide.

C. Bauhine calls it *Filicula maritima.*

We have one other ſpecies.

1. Dwarf Rock Fern, *Chamæ filix alpina pedicularis rubræ foliis.* The ſegments jagged.

GENUS VI.

ENGLISH MAIDENHAIR.

TRICHOMANES.

THE leaf is pinnated; and the pinnæ are rounded, placed regularly, beautiful, and diſtinct.

English Maidenhair.
Trichomanes vulgare.

The root is a tuft of fibres.
The leaves are numerous, four inches long, narrow, and beautifully pinnated: their colour is a dark green; and they are gloſſy.
The ſtalk is black.
The flowers and ſeeds are brown.
It is common on damp rocks.
C. Bauhine calls it *Trichomanes ſive polytrychum officinarum.*

We have three other ſpecies.

1. Branched Engliſh Maidenhair, *Trichomanes ramoſum.* The rib, or ſtalk, in this is green.
2. Jagged-leaved Engliſh Maidenhair, *Trichomanes foliis eleganter inciſis.* The pinnæ cut deeply.
3. Moonwort leaved Engliſh Maidenhair, *Adiantum nigrum foliis lunariæ.* The pinnæ rounded.

GENUS VII.

FORKED MAIDENHAIR.

ACROSTICUM.

THE leaves are very ſmall, and have long footſtalks: they are divided into forked ſegments; and the ſeeds ſtand in round dots.

Forked Maidenhair.
Acroſticum vulgare.

The root conſiſts of numerous fibres connected to a ſmall head.
The ſtalks are three inches high; and at the top each divides into a few flat and forked ſegments, forming a kind of leaf: this is of a pale green: the ſtalk is black at the bottom, pale upwards; and the ſeed are placed in round dots.
We have it on damp rocks.
C. Bauhine calls it *Filix ſaxatilis.* Others, *Adiantum furcatum.*

GENUS VIII.

MALE FERN.

FILIX MAS.

THE leaf is pinnated, and the pinnæ are again divided down to the rib into oblong ſegments. The ſeeds are placed on the hinder part of the pinnæ in a double ſeries of roundiſh ſpots.

1. Common Male Fern.
Filix mas vulgaris.

The root is thick, irregular, and rough on the ſurface.
The leaf is two feet long, the rib brown, and the pinnæ of a pale green.
The ſeeds lie on the back in ſpots of a yellowiſh brown.
It is common in woods and under hedges.
C. Bauhine calls it *Filix non ramoſa dentata.*

We have eight other ſpecies.

2. Prickly, auriculated Male Fern, *Filix mas non ramoſa pinnulis latis auriculatis ſpinoſis.*
3. Narrow-leaved prickly Male Fern, *Filix aculeata major pinnulis auriculatis crebrioribus foliis anguſtioribus.*
4. Dwarf prickly Male Fern, *Filix lonchitidi affinis.* A ſmall plant not five inches high.
5. Broad-leaved prickly Male Fern, *Filix mas aculeata foliis expanſis muſcoſa lanugine aſperſis.*
6. Male Fern, with thin ſet, deeply indented leaves, *Filix mas non ramoſa pinnulis anguſtis raris profunde dentatis.*
7. Creeping Water Fern, *Filix minor paluſtris repens dryopteris authorum.* The leaf very thin.
8. Pale-ſtalked Fern, with drooping pinnæ, *Filix minor pediculo pallidiore alis inferioribus deorſum flectantibus.*
9. Male Stone Fern, *Filix pumila ſaxatilis.* It reſembles the *dryopteis*, but is ſmaller.

GENUS IX.

WHITE MAIDENHAIR.

ADIANTUM ALBUM.

THE leaf has a naked footſtalk, and conſiſts of a few broad, thick diviſions. The ſeeds cover the whole under-ſurface.

1. White Maidenhair.
Adiantum album.

The root is a tuft of fibres.
The leaves are numerous, and two inches high.
The ſtalk is of a pale green; and the leaf is alſo of a whitiſh green on the upper ſide, and covered with a whitiſh duſt underneath.
It is common on old walls.
C. Bauhine calls it *Ruta muraria.*

We have one other ſpecies.
2. Narrow-leaved, tall, White Maidenhair, *Adiantum album elatius pinnulis anguſtioribus.*

GENUS X.

TRUE MAIDENHAIR.

CAPILLUS VENERIS.

THE leaf has a long footſtalk; and is divided into numerous, broad ſegments. The ſeeds are placed in white lines at their edges.

The True Maidenhair.
Capillus veneris verus.

The root conſiſts of numerous fibres.
The ſtalk is black and gloſſy.
The plant is ſix inches high.
The pinnæ are of a pale green; and the rows of ſeeds below are whitiſh.
We have it in Wales.
C. Bauhine calls it *Adiantum foliis coriandri.*

We have three other ſpecies.
1. Tunbridge Maidenhair, *Capillus veneris puſillus foliis bifidis vel trifidis.*
2. Great Maidenhair, *Capillus veneris pediculo pallide rubente.* A plant of a foot high.
3. Green Scotiſh Maidenhair, *Capillus veneris folio obtuſo ſaturate viridi.*

After theſe there ſtands in the *Synopſis Stirpium Britanicarum*, an imaginary plant. A leaf of the *white wood anemone.*

GENUS XI.

FEMALE FERN.

FILIX FŒMINA.

THE leaf is compoſed of very numerous pinnæ, on ſubdivided footſtalks. The ſeeds are placed in round dots.

1. Common Female Fern.
Filix fœmina vulgaris.

The plant is five feet high.
The ſtalk is thick and green.
The pinnæ are oblong, and of a pale green; and the ſeeds are placed on their back in ſmall, round, ferrugineous dots.
It is common on heaths.
C. Bauhine calls it *Filix ramoſa major pinnulis obtuſis non dentatis.* Others, *Filix fœmina.*

We have ſix other ſpecies.
2. Great, Branched Fern, with indented leaves, *Filix ramoſa pinnulis dentatis.* The leaves dark green.
3. Small, branched Mountain Fern, *Filix montana ramoſa minor argute denticulata.*
4. Oſmund Royal, *Filix ramoſa non dentata florida.* The ſeeds cluſtered on the tops of the branches.
5. Small, branched, Sea, Stone Fern, *Filicula ſaxatilis ramoſa maritima.* Of a pale green.
6. Dwarf, branched Fern, *Filix ramoſa minor.* This is the plant called *dryopteris* by Dioſcorides.
7. Fine cut Stone Fern, with ſlender, brittle ſtalks, *Filix ſaxatilis caule tenui fragili.*

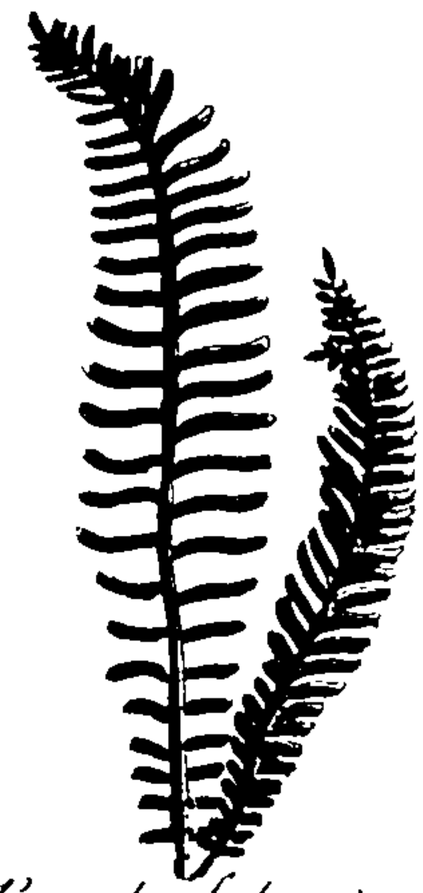
GENUS



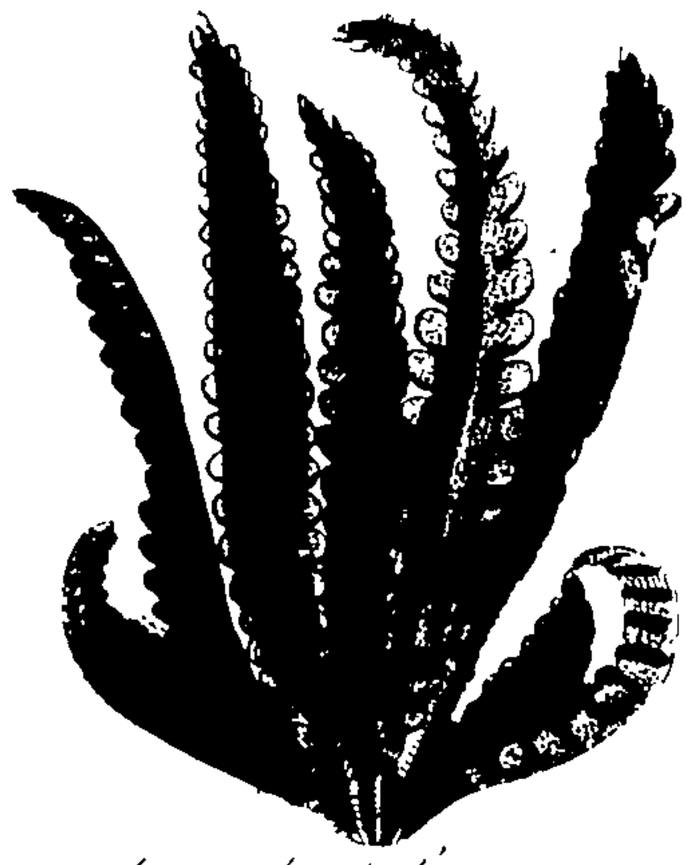
Common Harts-tongue.



Polypody.



Rough Spleenwort.



Smooth Spleen-wort

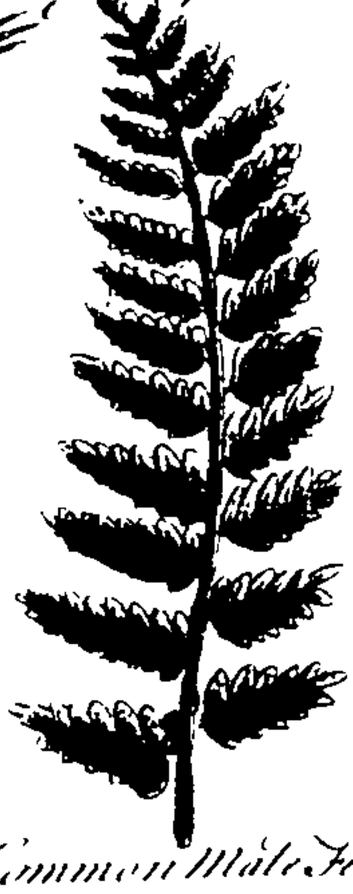


Dwarf Sea Fern

English Maidenhair



Forked Maidenhair.



Common Male Fern.



White Maidenhair.



True Maidenhair



Common Female Fern.



Black Maiden-hair.



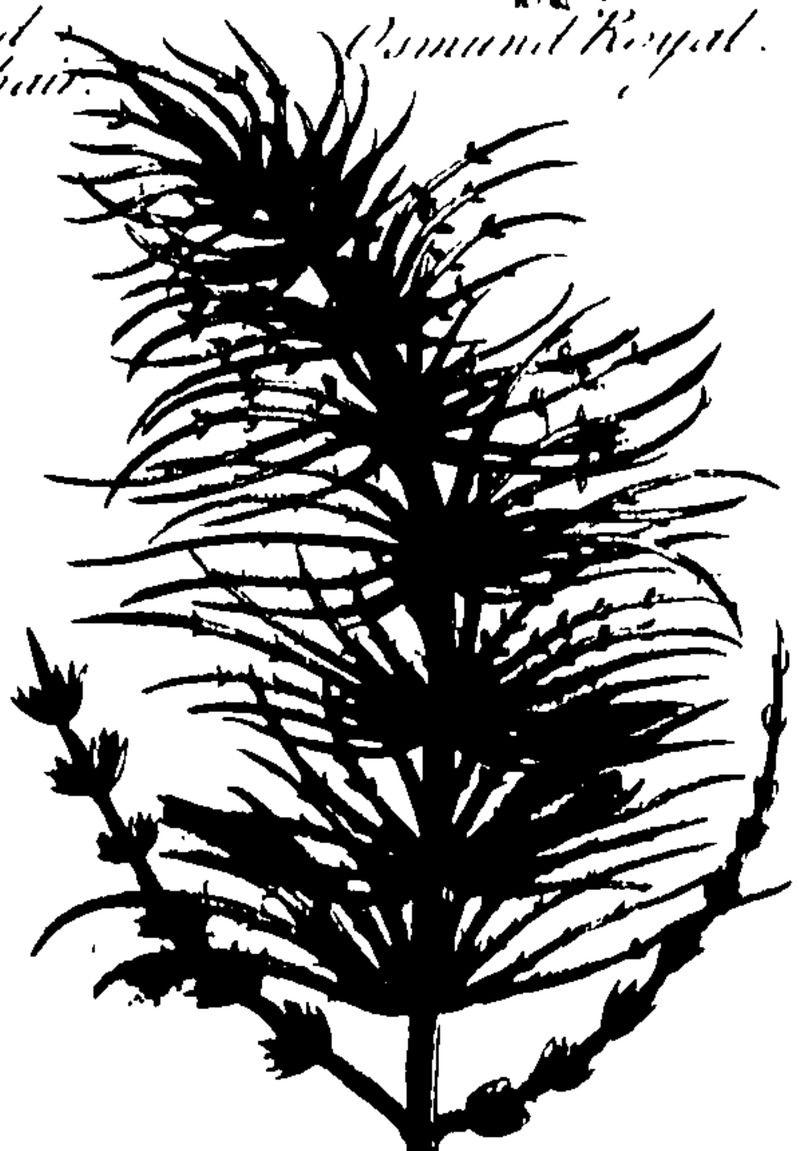
Winged Maiden-hair.

Common Royal.



Common Buckhead.





Common Buckhead.



Large Buckhead.

Adders Tongue. Moonwort.

Great Water Horsetail.

Wood Horsetail.

GENUS XII.

BLACK MAIDENHAIR.

ADIANTUM NIGRUM.

THE leaf has a long footſtalk. The pinnæ are ſubdivided into broad, jagged ſegments. The ſeeds are placed in lines.

1. Black Maidenhair.
Adiantum nigrum vulgare.

The plant is ten inches high.

The ſtalk is naked, and of a gloſſy black.

The pinnæ are broad, of a dark green, and deeply cut.

The ſeeds ſtand in rows on the under-ſide.

It is common in woods.

C. Bauhine calls it *Adiantum foliis longioribus pulverulentis.*

We have ſix other ſpecies.

1. Baſtard-hemlock-leaved Maidenhair, *Adiantum nigrum pinnulis cicutariæ diviſura.* A tender plant.
2. Small, flowering, Black Maidenhair, *Adiantum criſpum alpinum.* Theſe two are by ſome called *white maidenhairs.*
3. Round-leaved Black Maidenhair, *Filix elegans adianto nigro accedens ſegmentis rotundioribus.*
4. Dwarf Black Maidenhair, *Filix pumila petræa adianti nigri æmula.* Scarce two inches high.
5. Fine cut Black Maidenhair, *Filix minor longifolia pinnulis tenuiſſimis laciniatis.* In Ireland.
6. Winged Maidenhair, *Adiantum nigrum alato caule.* The leaves gloſſy and dark green.

This is the compleat liſt of *Engliſh ferns* and *capillary plants.*

Many virtues are attributed to them; but experience does not ſupport the account. The *common male fern* and the *oſmund royal* are celebrated againſt the rickets; and many have tried them, but unſucceſsfully. The *Maidenhairs* are eminently good againſt diſorders of the breaſt and lungs.

The END of the THIRTY-FOURTH CLASS.

THE

BRITISH HERBAL.

CLASS XXXV.

Plants whoſe flowers and ſeeds are minute and ſingly inconſpicuous, and are not placed on the back of the leaves.

GENUS I.

ADDER'S TONGUE.

OPHIOGLOSSUM.

THE ſeeds are arranged in a double ſerrated receptacle, riſing on a ſtalk from the baſe of the leaf.

Adder's Tongue.
Ophioglossum vulgare.

The plant conſiſts of a ſingle leaf and a ſpike.

The leaf is ſupported on a long, green foot-ſtalk; and is of an oval form, a fleſhy ſubſtance, and a pale green.

The ſpike is green at firſt, but as it ripens it grows browniſh.

It is common in meadows in April.

C. Bauhine calls it *Olphioglossum primum ſeu vulgatum.*

The ſpike is ſometimes ſplit, or double: in this caſe it has been ſuppoſed a diſtinct ſpecies.

The leaves boiled in lard make an excellent cooling ointment.

GENUS II.

MOONWORT.

LUNARIA.

THE plant conſiſts of a ſingle leaf, and a ſtalk ſupporting a cluſter of ſerrated ſeed-veſſels.

Moonwort.
Lunaria racemoſa.

The root is fibrous.

The plant is eight inches high.

The leaf is beautifully formed of round pinnæ; and the ſtalk is terminated by a branched cluſter of brown ſeed-veſſels.

We have it in the north of England in dry paſtures.

C. Bauhine calls it *Lunaria racemoſa minor ſeu vulgaris.*

GENUS III.

DUCKWEED.

LENTICULA.

THERE are hermaphrodite and female flowers upon the ſame minute plant: they are formed a-like of a rounded cup, which burſts at the ſide; and have no petals. In the hermaphrodite flowers the rudiment of the fruit fades; and in the female it ripens into a round ſeed-veſſel, with a point, containing numerous minute ſeeds.

1. Large Duckweed.
Lenticula major.

The plant conſiſts of a ſingle leaf, which floats upon the water: it is roundiſh, but irregularly waved; and of a fine green, tinged in ſome parts with red.

The fibres are two or three, ſhort and ſmall.

The flowers are extreamly minute, and grow principally near the edges of the leaves.

It is common on ponds and ditches.

C. Bauhine calls it *Lenticula paluſtris major.*

We have two other ſpecies.

1. Common Duckweed, *Lenticula vulgaris.* The leaves ſmaller, all green, and the fibres longer.
2. Three-cornered-leaved Duckweed, *Lenticula aquatica teiſulca.* The leaf ſomewhat of the ivy form.

GENUS IV.

HORSETAIL.

EQUISETUM.

THE flowers and ſeeds are collected into rounded heads, which are arranged together in an oval ſpike. The ſingle heads have many ridges, and they ſplit along theſe when ripe.

1. Great Water Horſetail.
Equiſetum paluſtre majus.

The plant is three feet high.

The ſtalk is hollow, jointed, and of a whitiſh green.

The leaves ſtand circularly at the joints; and they are ſlender, and of a deep green.

The club of flowers is brown.

It is common in marſhy places.

C. Bauhine calls it *Equiſetum paluſtre longioribus ſetis.*

We have eleven other ſpecies.

2. Corn Horſetail, *Equiſetum arvenſe longioribus ſetis.* The baſe is long, and of a pale green.
3. Naked, painted Horſetail, *Equiſetum nudum variegatum.* Early in ſpring in the north of England.
4. Wood Horſetail, *Equiſetum ſylvaticum tenuiſſimis ſetis.* The baſe brown, the reſt of a fine green.
5. Procumbent Wood Horſetail, *Equiſetum procumbens ſylvaticum ſetis uno verſu diſpoſitis.*
6. Long-leaved Marſh Horſetail, *Equiſetum paluſtre tenuiſſimis et longiſſimis ſetis.*
7. Many-headed Marſh Horſetail, *Equiſetum paluſtre minus polyſtachion.*
8. Long, pale-leaved Horſetail, *Equiſetum pratenſe longiſſimis ſetis.* The whole of a whitiſh green.
9. Leſſer Marſh Horſetail, *Equiſetum paluſtre minus.* The leaves ſhort, and of a deep green.
10. Smooth, naked Horſetail, *Equiſetum nudum lævius.* The ſtalks jointed and ſoft.
11. Rough, naked Horſetail, *Equiſetum nudum junceum.* The ſtalks harſh to the touch.
12. Branched, naked Horſetail, *Equiſetum nudum ramoſum.* Of a pale green.

GENUS V.

CHARA.

THE flower is extreamly minute. It conſiſts only of a cup formed of two little leaves; and is ſucceeded by a ſingle, oval ſeed, contained in a thin cruſt, mimicking a capſule or ſeed-veſſel. The growth of the plant reſembles the horſetail, jointed and ſurrounded at the joints with leaves.

1. Grey, brittle Chara.
Chara cinerea fragilis.

The root is fibrous.

The ſtalks are numerous, and three inches high.

The leaves are ſlender, and ſurround them at the joints, which are placed very cloſe on the upper part of the ſtalk.

The flowers are inconſiderable.

The whole plant is of a greyiſh colour, and brittle.

It is common on bogs, and ſometimes in ponds.

Ray calls it *Chara major ſubcinerea fragilis.*

We have four other ſpecies.

1. Stinking, brittle Chara, *Chara vulgaris fœtida.* Common under water in ditches.
2. Prickly Chara, *Chara major caulibus ſpinoſis.* In boggy places: the ſtalks twiſted and prickly.
3. Tender Chara, *Chara minor caulibus et foliis tenuiſſimis.* Of a greyiſh green colour.
4. Pellucid tough Chara, *Chara tranſlucens minor flexilis.* Of a greeniſh colour, and not brittle.

To theſe, which, as they have no known virtues, demand in this work no larger notice; yet with which, as they are Engliſh vegetables, we would not leave the reader wholly unacquainted, we ſhall add a ſhort notice of the moſſes, muſhrooms, and ſubmarine plants. Theſe are ſubjects which might alone fill volumes of curioſity. We ſhall not extend this work beyond its deſtined limits by a large account of them; but in a few words, with the aſſiſtance of their figures, give a general idea of their ſeveral forms.

MOSSES.

MOSSES.

GENUS I.

BYSSUS.

BYSSUS is a moſs compoſed of downy, duſty, or filamentous matter, without any apparent flowers or ſeeds.

We have figured the yellow, duſty Byſſus, *Byſſus pulverulanta flava.* Common on old walls and of long duration.

GENUS II.

CONFERVA.

CONFERVA is a moſs compoſed of regular, plain or jointed filaments, without any apparent fructification.

We have figured the Hairy Riverweed, *Conferva vulgaris.* It is of a deep green, and common in brooks.

GENUS III.

ULVA.

ULVA is a moſs conſiſting only of thin leaves, without any apparent fructification.

We have figured the Oyſter Ulva, *Ulva maritima lactucæ ſimilis.* Common on ſhells and ſtones under ſalt water.

GENUS IV.

LICHENOIDES.

A Moſs of a firm ſubſtance, branched, ſhrubby, hollow, or cruſtaceous, and having a kind of ſhield for its fructification.

We have figured five ſpecies of this to repreſent its ſeveral forms. 1. Common Tree Lichenoides, *Muſcus arboreus cum orbiculis.* Of a greyiſh green. 2. Branched Coraline Lichenoides, *Lichenoides tubuloſum ramoſiſſimum fruticuli ſpecie candicans.* This is white. 3. Common Cup Moſs, *Muſcus pyxidatus vulgaris.* Of a greyiſh green. 4. Grey, cruſty Lichenoides, *Lichenoides cinereum cruſtaceum et leproſum.* Of a greyiſh colour. Of this kind alſo is the *grey, ground liverwort,* recommended for the bite of a mad dog; dry and foliaceous. 5. Oak Lungwort, *Lichenoides peltatum arboreum maximum.*

GENUS V.

MNIUM.

A Moſs with two kinds of flowery heads, naked, and encloſed in a membrane.

We have figured the Cluſter-headed Mnium, *Mnium perangustis et brevibus foliis.* One of the prettieſt of the moſs kind.

GENUS VI.

FONTINALIS.

A Moſs with heads placed on very ſhort footſtalks, and ſplitting at the top when ripe.

We have figured the Triangular Fontinalis, *Fontinalis major foliis triangularibus.* Of a fine green. Common near waters.

GENUS VII.

HYPNUM.

A Moſs with heads covered with membranous hoods, ſupported on long footſtalks riſing with a ſcaly baſe from the boſoms of the leaves.

We have figured the *Small headed Hypnum.* Common in woods.

GENUS VIII.

POLYTRICHUM.

A Moſs with heads covered with woolly caps, and with upright ſtalks, and long footſtalks to the heads, without a ſcaly baſe.

We have figured the ſmall Polytrichum, *Polytrichum minus.* The leaves a dark green.

GENUS

Yellow dusty Byssus

Cyster Ulva

Common Fire Liche-noides

Branched Coralline Lichenoides

Common Cup. Moss

Curly Riverweed

Small branded Hypnum

Small Polytrichum

Round headed Bryum

Small Scaly Lichenastrum

Grey Crusty Lichenoides

Clustered Small Mnium

Upright Selago

Triangular Fontinalis

Common Lycopodium

Broad Leaved Lichen

Hemispheric Mushroom

Great Marsh Sphagnum

Common Mushroom

Reticulated Mushroome

Phallus Mushroom

Oak Lungwort

Common Coralline

Common Fire

Ragged Staff Grassy Hyg

Small

GENUS IX.

BRYUM.

A Moſs with heads covered with ſmooth caps, riſing on ſlender footſtalks from the tops of the branches.

We have figured the Round-headed Bryum, *Brium capitulis tumidis rotundioribus.* Of a pale green.

GENUS X.

SPHAGNUM.

A Moſs with naked heads on ſhort footſtalks.

We have figured the great, Marſh Sphagnum, *Sphagnum cauliferum et ramoſum paluſtre molle.* A whitiſh moſs, with red tops.

GENUS XI.

SELAGO.

A Moſs with ſeeds incloſed in a ſkinny caſe placed in the boſoms of the leaves, without footſtalks.

We have figured the Upright Selago, *Selago erecta abietiformus.* Of a fine deep green.

GENUS XII.

LYCOPODIUM.

A Moſs with ſeeds in thin caſes diſpoſed in a kind of clubs, with ſmall leaves intermixed.

We have figured the Common Lycopodium, *Muſcus terreſtris clavatus.* Of a yellowiſh green.

GENUS XIII.

LICHENASTRUM.

A Moſs with ſmall heads, placed naked on ſlender footſtalks, which, when ripe, burſt into four parts.

We have figured the ſmall, ſcaly Lichenaſtrum, *Lichenaſtrum imbricatum minus.* Of a pale green.

GENUS XIV.

LICHEN.

A Foliaceous moſs, with male flowers, ſmall and numerous, on long footſtalks; and female flowers hollow on the ſurface of the leaves.

We have figured the broad-leaved Lichen, *Lichen foliis latioribus.* Of a fine green.

MUSHROOM.

FUNGUS.

A Vegetable without leaves; of a fleſhy ſubſtance, with imperceptible fructifications.

Of theſe we have figured four kinds. 1. The Hemiſpherick Muſhroom, *Fungus parvus hemiſphericus.* White above and below. 2. The Common Muſhroom, *Fungus eſculentus vulgaris.* White above, and fleſh-coloured below. 3. The Reticulated Muſhroom, *Fungus reticulatus coccineus.* The bottom purple, the reticulated part ſcarlet, ſpotted with purple. 4. The Phalloide Muſhroom, *Fungus phalloides.* White and ſtinking.

SUBMARINE PLANTS.

VEGETABLES growing under ſea-water, with minute and uncertain fructifications.

We have figured one ſpecies of each of the four principal kinds. 1. Common Coraline, *Corallina Anglica.* Of a whitiſh colour, tinged with green and purple; and of a firm ſubſtance. Celebrated for the cure of worms. 2. Common Sea Fucus, *Fucus maritimus vulgatiſſimus.* Of a fine purpliſh brown. 3. Sea, Ragged Staff, *Fucus ſpongioſus nodoſus.* Of a tender ſubſtance, and whitiſh. 4. Graſſy Alga, *Alga vulgaris.* Of a faint green. This is the only *ſubmarine* which has a regular root. The reſt adhere to the ſtones, by a broad, naked baſe.

The END of the THIRTY-FIFTH CLASS.

INDEX.

A.

ABies page 509
Abrotanum 463
Abſinthium 402
Abutilon 59
Acanthus 132
Acer 522
Acetoſa 485
Acinos 362
Aconitum 45
Aconitum hyemale 47
Acorus 507
Acroſticum 526
Adder's-tongue 530
Adiantum album 528
Adiantum nigrum 529
Adonis 13
Agrifolium 520
Agrimony 344
Aizoon 53
Alcea 27
Alchimilla 492
Alder 516
Alder, black 519
Alexander 406
Alga 533
Alkanet 393
Alkekengi 335
Allheal 367
Alliaria 235
Allium 467
Allſeed 227
Alnus 510
Alſine 179
Alſinella 226
Althæa 26
Alyſſum 274
Amaracus 381
Ammania 230
Ammi 425
Anagallis 67
Anblatum 128
Anchuſa 393
Androſace 99
Androſæmum 175
Anemone 12
Anethum 421
Angelica 405
Angelica, berry-bearing 333
Aniſe 424
Aniſum 424
Anonis 310
Anthyllis 290
Antirrhinum 111
Aparine 398
Aphaca 282
Apium 411
Apple 514
Aponogeton 479
Aquilegia 41
Arabis 253
Aralia 333
Arbutus 518
Argemone 152
Argentina 6
Ariſarum 336
Ariſtolochia 129
Arrowhead 2
Arſmart 486
Artimeſia 463
Arum 329
Aſarabacca 492
Aſcyrum 174
Aſh 512
Aſperugo 389
Aſperula 398
Aſter 448
Aſtrantia 426
Atragine 29
Atriplex 489
Aſarum 492
Aſparagus 325
Avena 495
Avens 8

Auricula page 98
Azalea 102

B.

BAccharis 452
Ballote 396
Balſam 214
Balſamina 214
Balſamine 207
Barba Capræ 48
Barberry 520
Barley 495
Barrenwort 228
Barleria 144
Baſil 382
Baſil, wild 362
Baſtard Cinquefoil 4
Baum 383
Bean 286
Bear's-breech 132
Becabunga 94
Beech 509
Beet 491
Belladonna 328
Bellflower 70
Bellflower, ivy-leaved 113
Bellis 458
Berberis 520
Beta 491
Betonica 361
Betony, wood 361
Betula 510
Beupleurum 418
Bignonia 132
Bindweed 57
Bindweed, mountain 100
Bindweed, prickly 332
Birch 510
Bird's eye 69
Bird's foot 292
Birthwort 129
Biſhopſweed 425
Biſtort 488
Bladdernut 521
Blattaria 89
Blite 490
Blitum 490
Bluebottle 433
Borage 389
Borago 389
Box 511
Bramble 521
Braſſica 238
Brooklime 94
Broome 523
Broomrape 125
Bryonia 318
Bryum 533
Buckbean 77
Buck's horn 153
Buckthorn 520
Buckthorn, ſea 512
Buckwheat 486
Bugle 371
Bugloſs 387
Bugloſſum 387
Bugloſs, cowſlip 385
Bugloſs, viper's 387
Bugula 371
Bulbocaſtanum 406
Bulbocodium 471
Burdock 432
Burnet Saxifrage 409
Bur-reed 506
Burnet 346
Burſa Paſtoris 260
Butcher's broom 330
Butonius 35
Butterbur 153
Butterwort 107
Buxus 511
Byſſus 532

C.

CAbbage 238
Calceolus 478
Calamintha 368
Calamint page 368
Calla 337
Caltha 34
Caltrop 211
Caltrop, water 230
Campanula 70
Campion 164
Cannabis 483
Cannacorus 109
Candy Carrot 425
Capillus veneris 528
Caprifolium 516
Capſicum 104
Caraway 410
Cardamine 246
Cardiaca 364
Carduus 428
Carlina 448
Carthamus 431
Carrot 414
Carum 410
Catterpillar 313
Caryophyllata 8
Caryophyllus 162
Caſſida 370
Caſtanea 509
Catmint 260
Cat's-tail 506
Cauculis 415
Celandine 145
Centaurium majus 474
Centaurium minus 62
Centaury 62
Centaury, great 434
Ceraſtium 183
Ceraſus 518
Cerinthe 394
Ceterach 526
Chærophyllum 403
Chamædrys 380
Chamæfilix 526
Chamæmelum 459
Chamæmile 459
Chamæmorus 331
Chamæperi clymenum 331
Chamæpitys 371
Chara 531
Chelidonium majus 145
Chelidonium minus 20
Chelone 131
Cherry 518
Chervill 403
Cheſnut 509
Chich 298
Chickweed 179
Chickweed, berry-bear. 210
Chondrilla 444
Chriſtaphoriana 320
Chryſanthemum 456
Cicer 298
Cichorium 443
Cicuta 411
Cinquefoil 3
Circæa 138
Cirſium 427
Ciſtus 170
Ciſtus, marſh 212
Clandeſtina 129
Clary 358
Cleavers 398
Clematis 11
Climber 11
Climber 29
Clinopodium 364
Cloudberry 331
Clymenum 281
Clypeola 275
Cnicus 448
Cochlearia 266
Cock's-comb 119
Cock's-head 293
Colchicum 470
Colt's-foot 446
Columbine 41
Comfry 391
Conferva page 532
Convallaria 322
Convolvulus 57
Conyza 447
Corchorus 215
Coriander 417
Coriandrum 417
Corn marygold 456
Cornus 517
Coronopus 153
Coralline 533
Corrigiola 493
Cortuſa 97
Corylus 508
Cotyledon 51
Cow-wheat 123
Cowſlip 68
Cracca 285
Crambe 257
Crane's-bill 125
Crateogonon 123
Creſs 267
Creſs ſciatica 263
Crithmum 413
Croſswort 395
Crowfoot 15
Crowfoot, globe 33
Cruciata 395
Cuckowpint 329
Cucubalus 210
Cudweed 453
Cumin 424
Cumin, podded 228
Currant 515
Cuſcuta 89
Cyanus 433
Cyclamen 107
Cymbalaria 113
Cyminum 422
Cynocrambe 483
Cynogloſſum 386
Cyperus 504

D.

DAiſy 458
Daffodill 408
Damaſonium 35
Dandelion 441
Daucus 414
Daucus Creticus 425
Dead-nettle 365
Delphinium 142
Dens Leonis 441
Dentaria 252
Dentaria 128
Devil's-bit 464
Diapenſia 419
Dictamnus Creticus 381
Digitatis 116
Dill 421
Dipſacus 464
Dittander 261
Dittany, white 44
Dittany of Crete 381
Dock 484
Dodder 83
Dogberry 517
Dortmanna 126
Draba 251
Dracontium 336
Dragons 336
Dropwort 24
Dropwort, water 407
Duckweed 530
Dyer's-weed 207

E.

EArthnut 406
Echinophora 417
Echium 387
Egg-plant 327
Elatine 113
Elder 517
Elder, water 517
Elecampane 449
Elm 521

Empetrum

INDEX.

Empetrum page 511
Endivia 445
Epilobium 146
Epimedium 228
Equiſetum 531
Erica 522
Erigerum 451
Eruca 236
Ervum 299
Eryngium 405
Erygo 419
Eryſimum 250
Euonymus 521
Eupatorium 452
Euphorbium 157
Euphraſia 122
Eyebright 122

F.

Faba 286
Faba Ægypt. 224
Fagopyrum 486
Fagus 509
Fennel 413
Fennel, hog's 402
Fern, female 528
Fern, male 526
Ferula 421
Ferrum equinum 391
Feverfew 460
Figwort 114
Filipendula 24
Filix fœmina 527
Filix mas 526
Fir 509
Flax 193
Fleabane 447
Fleawort 159
Flowering Reed 105
Fluellin 113
Fœniculum 413
Fœnugreek 309
Fontinalis 532
Foxglove 116
Fragaria 2
Frangula 126
Fraxinella 44
Fraxinus 522
Frogbit 139
Fryar's cowle 336
Fucus 533
Fumaria 347
Fumitory 347
Fungi 553
Furz 524

G.

Gale 510
Galega 298
Galeopſis 539
Gallium 397
Garlick 467
Geniſta 523
Geniſta ſpinoſa 524
Gentian 60
Gentiana 60
Geranum 195
Gerardia 131
Germander 380
Germander, water 372
Germander, tree 380
Geum 191
Gingidium 425
Gith 213
Gladiole, water 126
Gladiolus lacuſtris 126
Glaſſwort 482
Glaucium 144
Glaux 78
Glaux 292
Globeflower 33
Glycyrrhiza 287
Gnaphalium 453
Goat's-beard 442
Goat's Rue 298
Golden rod 449
Gramen Parnaſſi 192
Gramina 496
Graſs of Parnaſſus 192
Graſſes 496
Gratiola 118
Gromwell 390
Ground-ivy 369
Ground-pine 371
Groundſell 451
Guinea pepper 104

H.

Hare's-ear 418
Hare's-foot 306
Harmala 212
Hart's-tongue page 425
Hatchetvetch 294
Hazle 508
Hawkweed 438
Heart's-eaſe 204
Heath 522
Hedera 516
Hedera terreſtris 369
Hedge muſtard 250
Hedge nettle 359
Hedyſarum 294
Helenium 449
Heliotropium 393
Hellebore, black 32
Helleborine 477
Helleborus niger 32
Hemlock 411
Hemlock, water 412
Hemp 483
Hemp agrimony 461
Henbane 55
Hepatica 28
Herb Chriſtopher 320
Herniaria 493
Heſperis 235
Hieracium 478
Hippocrepis 291
Hoarhound 363
Hoarhound, baſe 361
Hoarhound, ſtinking 369
Hoarhound, water 355
Holly 520
Holly, ſea 419
Hollyhock 26
Honeywort 394
Honeſuckle 516
Honeyſuckle, dwarf 531
Honeyſuckle, French 294
Hop 482
Hordium 495
Horminum 358
Hornbeam 513
Horſeradiſh 260
Horſeſhoe vetch 291
Horſetail 531
Hottonia 78
Hound's-tongue 386
Houſeleek 40
Hyacinth 469
Hydrocharis 139
Hydrocotyle 419
Hyoſcyamus 55
Hyoſeris 449
Hypecoum 228
Hypericum 173
Hypnum 532
Hippogloſſum 537
Hypopitys 222
Hyſſop 377
Hyſſopus 377
Hyſſop, hedge 118

I.

Jacea 439
Jacobæa 450
Iberis 263
Impatiens 207
Imperatoria 423
Iris 472
Iſatis 254
Julyflower 162
Juncus 505
Juniper 511
Juniperus 511
Ivy 316

K.

Kidney bean 296
Kidneywort 191
Knapweed 433
Knawel 497
Knotgraſs 487

L.

Lactuca 435
Ladies bedſtraw 327
Lady's mantle 492
Lady's ſlipper 478
Ladyſmock 246
Lagopus 306
Lamium 365
Lampſana 443
Lapathum 484
Lappa 432
Lark's-ſpur 42
Laſerpitium 422
Laſerwort 422
Lathyrus 279
Lavender, ſea 343
Lavender 374
Lavendula 374
Laureola page 519
Laurus Alexandrina 387
Leadwort 102
Ledum 212
Ledum 523
Lens 297
Lentibularia 125
Lenticula 530
Lentill 297
Leontopetalon 219
Leopard's-bane 29
Lepidium 261
Lettuce 435
Lettuce, lambs 342
Leucanthemum 459
Leucoium 233
Leviſticum 410
Libanotis 420
Lichen 533
Lichenaſtrum 533
Lichenoides 532
Liguſtrum 519
Lilly, water 223
Lilly of the valley 322
Lime 523
Limnopeuce 481
Limonium 343
Linaria 108
Linnæa 76
Linum 193
Lionleaf 219
Liquorice 287
Lithoſpermum 390
Lonchitis 526
Looſeſtrife 64
Lotus 314
Lotus 224
Lovage 423
Lucerne 312
Ludwigia 229
Lunaria 530
Lunaria 258
Lupine 295
Lupinus 295
Lupulus 482
Luteola 207
Lychnidæa 103
Lychnis 164
Lycopodium 533
Lycopſis 388
Lycopus 355
Lyſimachia 64

M.

Mad-apple 327
Madder 396
Madwort, German 389
Maidenhair, black 529
Maidenhair, Engliſh 526
Maidenhair, forked, 527
Maidenhair, true 527
Maidenhair, white 526
Mallow 24
Mallow, Indian 49
Malva 24
Malus 514
Mandragora 334
Mandrake 334
Maple 522
Marjoram, ſweet 381
Marjoram, wild 357
Marrubium 363
Marſh ciſtus 212
Marſhmallow 26
Marum 378
Marygold, marſh 34
Maſterwort 433
Maſterwort, black 426
Matricaria 460
May-apple 334
Meadow-rue 346
Meadowſweet 23
Medeola 220
Medica 311
Melampyrum 123
Meliſſophyllum 367
Melilot 308
Meliſſa 383
Melongena 327
Menianthes 77
Mentha 351
Mercurialis 483
Mercury, dog's 483
Mercury, French 483
Meſpilus 415
Meum 404
Milleſolium 458
Milfoil, hooded 125
Milkwort 81
Mint page 351
Miſletoe 519
Mitella 210
Molucca 312
Moneywort 65
Monk's hood 45
Monophyllum 322
Moonwort 530
Moſchatell 324
Moſſes 532
Mothmullein 89
Motherwort 364
Mouſe-ear 441
Mouſe-ear ſcorpion graſs 390
Mouſetail 14
Mnium 532
Mudweed 84
Mugwort 463
Mullein 87
Muſci 533
Muſhrooms 533
Muſtard 241
Myagrum 264
Myoſotis 390
Myoſuros 14
Myrrhis 404

N.

Narciſſus 468
Naſturtium 267
Navelwort 51
Navelwort 99
Navew 240
Nettle 484
Nepeta 360
Nicotiana 95
Nigella 213
Nightſhade 326
Nightſhade, deadly 328
Nightſhade, Ench. 138
Nightſhade, ſleepy 335
Nipplewort 443
Niſſolia 289
Nummularia 65
Nux 508
Nymphæa 223
Nymphoides 77

O.

Oak 509
Oat 495
Ochrus 297
Ocymum 382
Œnanthe 407
Oldenlandia 229
One blade 322
Onobrychis 293
Ononis 310
Ophioglоſſum 530
Ophrys 478
Opulus 517
Orach 489
Orchis 474
Origanum 357
Ornithogalum 469
Ornithopodium 292
Orobanche 126
Orobus 288
Orpine 36
Oxycoccus 324
Oxeye 457
Oxlip 69
Oxys 80

P.

Pæonia 47
Panax 420
Papaver 141
Paralyſis 68
Parietaria 491
Paris 323
Parnaſſia 192
Paronychia 259
Parſley 424
Praſley, baſtard 415
Parſley, rock 414
Parſnep 401
Parſnep, cow 400
Parſnep, water 408
Paſqueflower 10
Paſtinacha 401
Pea 278
Pear 514
Pearlwort 220
Pedicularis 119
Pellitory of the wall 491
Pellitory umbellif. 426
Pennyroyal 354
Pennywort 52
Pennywort, marſh 419
Pentaphides 4

Penta-

INDEX.

Pentaphyllum page 3
Pentapterophyllon 392
Pepper-graſs 481
Periwinkle 52
Pervinca 52
Perſicaria 483
Petaſites 452
Petroſelinum 424
Peucedanum 402
Phalangium 473
Phaſeolus 296
Pheaſant's eye 13
Phellandrium 412
Phyllitis 585
Pilewort 20
Piloſella 441
Pilularia 481
Pimpernell 67
Pimpinella ſaxifraga 400
Pinguicula 107
Pink 162
Piony 47
Piſum 278
Plantaginella 84
Plantago 152
Plantago aquat. 22
Plantain 152
Plantain, ſtarry 35
Plantain, water 22
Plumbago 102
Pneumonanthe 60
Podograria 405
Podophyllum 331
Polimonium 79
Polygala 81
Polygonum 487
Polymountain 379
Polium 379
Polygonatum 320
Polypodium 525
Polypody 525
Polytrichum 532
Pondweed 488
Poplar 512
Poppy 141
Populus 512
Portula 218
Portulaca 214
Potamogiton 488
Purſlain 214
Primroſe 68
Primula 68
Privet 519
Prunella 362
Prunus 518
Pſyllium 159
Ptarmaca 457
Pulegium 354
Pulmonaria 385
Pulſatilla 10
Purſlain, water 218
Pyrethrum umbell 426
Pyrola 85
Pyrus 514

Q.

Quercus 509

R.

Radicula 265
Radiola 227
Radiſh 243
Ragwort 450
Rampion 71
Ranunculus 15
Raphaniſtrum 244
Raphanus 243
Raphanus ruſt. 268
Rapum 249
Rapunculus 71
Rattle, red 119
Rattle, yellow 121
Reſeda 209
Reſtharrow 310
Rhamnoides 512
Rhamnus 520
Rhinanthus 121
Ribes 519
Rocket page 236
Rocket, baſe 209
Roella 104
Rorella 187
Roſa 515
Roſe 515
Roſe of Jericho 272
Roſemary 376
Ros marinus 376
Ros ſolis 187
Rubeola 396
Rubia 396
Rubia cynanchica 39
Rubus 521
Rue 156
Rue, wild 218
Ruellia 135
Rupturewort 493
Ruſcus 330
Ruſh 505
Ruſh, flowering 35
Ruta 156
Rye 495

S.

Saff-flower 431
Saffron 470
Saffron, meadow 470
Sage 373
Sage, wood 372
Sage of Jeruſalem 385
Sagitta 21
Saint John's wort 173
Sallad, corn 342
Sallcaria 218
Sallcornia 482
Salix 512
Saltwort 78
Salvia 373
Sambucus 517
Samolus 66
Sampire 413
Sampire, prickly 417
Sanguiſorba 346
Sanicle 419
Sanicle, mountain 97
Saracena 216
Saxifraga 189
Saxafraga aurea 497
Saxifrage 189
Saxifrage, golden 491
Saxifrage, meadow 412
Satureia 377
Savory 377
Saw-wort 431
Scabioſa 464
Scabious 464
Scammony 58
Scandix 403
Scirpus 505
Sclarea 357
Scleranthus 49
Scordium 372
Scorodonia 372
Scorpioides 390
Scorzonera 444
Scrophularia 114
Scurvygraſs 266
Sea-parſley 410
Secale 495
Securidaca 299
Sedum 37
Selago 533
Selfheal 362
Selinum 414
Sempervivum 40
Senecio 451
Sengreen 63
Ser-mountain 422
Serpyllum 349
Serratula 431
Service 514
Seſamum 134
Seſeli 412
Shepherd's needle 423
Shepherd's purſe 269
Sideritis 390
Siler montanum 423
Silverweed page 6
Sinapi 241
Sinapiſtrum 255
Siſarum 424
Siſymbrium 245
Sium 408
Skirret 424
Sloe 518
Smallage 411
Smilax 332
Smyrnium 406
Snapdragon 115
Snail 313
Sneezewort 457
Solnaum 326
Soldanella 100
Soldier 140
Solomon's ſeal 320
Sonchus 437
Sorbus 513
Sorrel 485
Southernwood 463
Sowbread 191
Sowthiſtle 437
Spaniſh toothpick 425
Sparganium 506
Speculum 75
Speedwell 90
Sphagnum 533
Sphondylium 400
Spindle 521
Spignell 404
Spergula 184
Spleenwort 526
Spurge 148
Spurge laurel 519
Sparrey 184
Squinancywort 399
Stachys 361
Stæchas 375
Staphis agria 44
Staphylodendrum 521
Staveſacre 44
Star of Bethlehem 469
Starwort 199
Starwort 448
Statice 345
Stellaria 136
Stonecrop 31
Stramonium 96
Stratiotes 140
Strawberry 2
Strawberry-tree 518
Submarine plants 533
Subularia 273
Succiſa 464
Sundew 187
Sunflower 179
Sweetbeard 49
Sweet gaule 510
Sweetwilliam 162
Symphytum 391

T.

Tamus 389
Tanacetum 461
Tanzy 481
Tare 283
Taxus 512
Teaſel 464
Telephium 39
Teucrium 380
Thalictrum 346
Thapſia 422
Thelium 344
Thiſtle 428
Thiſtle, gentle 427
Thlaſpi 269
Thora 29
Thorn-apple 96
Thrift 342
Throatwort 74
Thyme 368
Thyme, mother of 342
Thymus 358
Tilia 523
Tithymalus 148
Toadflax 302
Toadflax, baſtard page 344
Tobacco 95
Toothwort 252
Toothwort 128
Tordylium 402
Tormentill 7
Tormentilla 7
Tournefortia 394
Tower muſtard 249
Trachelium 74
Trago origanum 378
Tragopogon 442
Trefoil 302
Trefoil bird's-foot 314
Trefoil hop 307
Tribulus aq. 230
Trichomanes 526
Trifolium 302
Trifolium lup. 307
Triglochin 505
Triticum 494
Trollius 33
Tuelove 323
Trumpetflower 132
Turnep 240
Turnſole 393
Turritis 249
Tuſſelago 446
Twyblade 478
Typha 506

U.

Valerian 339
Valerian, Greek, 79
Valerianella 342
Venus Glaſs 75
Verbaſum 87
Verbena 356
Verbeſina 461
Veronica 90
Vervain 356
Vetch 283
Vetchgraſs 289
Vetch, kidney 290
Vetch, wood 218
Vicia 283
Viola 203
Violet 203
Violet, dame's 235
Virga aurea 449
Viſcum 519
Vitis idæa 516
Ulmaria 25
Ulmus 521
Ulva 532
Urtica 484

W.

Wallflower 233
Wallnut 508
Watercreſs 245
Waterlilly, fringed 78
Water radiſh 265
Water violet 78
Wayfaring tree 517
Wheat 494
Whitlowgraſs 259
Whortle 516
Whortle, marſh 324
Willow 512
Willowherb 146
Willowherb, ſpiked 218
Windflower 12
Winter cherry 335
Wintergreen 85
Woad 254
Wolfsbane, winter 47
Woodruffe 398
Woodſorrel 80
Wormwood 402

X.

Xanthium 484

Y.

Yarrow 458
Yew 512

Z.

Zanichellia 479

FINIS.